Academic Research and Development Expenditures:

Fiscal Year 2002

Detailed Statistical Tables

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General Notes

The data presented in this report were compiled from the National Science Foundation's (NSF's) fiscal year (FY) 2002 Survey of Research and Development Expenditures at Universities and Colleges (academic R&D expenditures survey). They refer to science and engineering expenditures for separately budgeted research and development (R&D). Terms used in institutional accounting procedures are incorporated throughout the tables.

The term *separately budgeted R&D expenditures* includes all funds expended for activities specifically organized to produce research outcomes and commissioned by an agency either external to the institution or separately budgeted by an organizational unit within the institution. *Expenditures* are funds actually spent by an institution during its fiscal year. *Separately budgeted R&D equipment purchased from current funds* includes all research equipment purchased under sponsored research project awards.

Federally funded research and development centers (FFRDCs) are R&D-performing organizations that range from the traditional contractor-owned/ contractor-operated or Government-owned/contractor-operated organizational structures to various degrees of contractor/ Government control and ownership. FFRDCs are formed to achieve particular Federal R&D objectives that cannot be met as effectively by existing organizations.

The terms *imputation* and *imputed data* refer to the computerized process by which NSF develops estimates of data when institutions do not furnish the information upon request. Using this process, estimates are developed that are based primarily on key data items reported in prior-year surveys. When these key data items are not available, estimates are based on figures derived from data of respondent institutions that have similar characteristics, including highest degree granted and type of institutional control (public or private). In this publication, the letter "i" is used to identify imputed data and the letter "e" is used when institutional respondents indicated that their data were estimated or when data required slight mathematical adjustments.

Data presented in trend tables are assembled from the most recently completed survey cycle. Since prior-year data are reviewed for consistency with current-year responses and, when necessary, are revised in consultation with institutional respondents, references to prior-year data should be restricted to this document.

Requests for additional information concerning the survey findings for the current or prior surveys should be directed to John E. Jankowski at—

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SECTION A. TECHNICAL NOTES

SCOPE OF THE SURVEY

Data for the National Science Foundation's (NSF) fiscal year (FY) 2002 report on research and development (R&D) expenditures were collected from 625 institutions of higher education in the United States and Outlying Areas. These institutions have doctoral programs in science and engineering (S&E), are historically black colleges or universities (HBCUs) that expend any amount of separately budgeted R&D in S&E, or are master's or bachelor's degree-granting institutions that expend at least $150,000 in separately budgeted R&D in S&E.

In addition, the survey collects information on R&D about each of the Nation's 36 federally funded research and development centers (FFRDCs). Of these 36 FFRDCs, 16 are administered by academic institutions, 16 are administered by nonprofit organizations, and 4 are administered by industrial organizations.

To qualify, an FFRDC must be engaged in basic or applied research, development, or management of R&D activities, and the results of these activities must be directly monitored by the Federal Government—usually a single agency—in a relationship expected to be maintained on a long-term basis. The center must be operated, managed, and administered as an autonomous organization or as an identifiable separate operating unit of its parent institution. Finally, 70 percent or more of the center's financial support must be received from the Federal Government. Although the same survey form (NSF Form 411) is used to collect data from both academic institutions and FFRDCs, FFRDCs were asked to provide only item 1 data, or their R&D expenditures by source of funding. The FFRDC R&D data are included in tables B70-72.

The survey population was reviewed prior to mailing the questionnaires to ensure that each institutional classification was accurate. Characteristics of the schools were reviewed before and during the course of the survey to determine if changes had occurred (i.e., in highest degree granted or in terms of school openings, closings, or mergers).

FY 2002 SURVEY FRAME DESIGN

The NSF Survey of Research and Development Expenditures at Universities and Colleges (academic R&D expenditures survey) is a census of the full population of eligible academic institutions. Prior to FY 1998, a census of eligible institutions was conducted about every five years; during intervening years eligible institutions were sampled. Since then, a census is conducted annually. NSF has also conducted a population review each year to ensure that all institutions that meet the inclusion criteria are surveyed. This review is based on the survey frame design developed in FY 1998:

- All S&E doctorate-granting institutions and all HBCUs are surveyed.
- All S&E master's and bachelor's degree-granting institutions that reported at least $150,000 in separately budgeted R&D expenditures in S&E in the previous fiscal year are surveyed. NSF contacted the master's and bachelor's degree-granting institutions that were not in the population prior to the census coverage to determine whether they met the $150,000 expenditure criterion. Institutions with a minimum of $150,000 were added or retained in the survey population.

In FY 2002 NSF conducted a population review using the above criteria. As a result of adding and deleting institutions from the survey population to comply with the inclusion criteria, the overall number of institutions surveyed increased from 646 in FY 2001 to 661 in FY 2002.

SURVEY INSTRUMENT

Most major R&D performers have incorporated into their record-keeping systems the data that are essential to complete this survey, thereby ensuring a consistent format from one year to the next. Such consistency yields the most useful statistics for time series. As a rule, information to complete this questionnaire is found within the institutions' year-end accounting records.

The survey questionnaire consists of five main items:

Item 1 is a request that institutions report their total current expenditures for separately budgeted science and engineering R&D for all activities specifically organized to produce research outcomes and either commissioned by an agency external to the institution or separately budgeted by an organizational unit (i.e., research centers) within the institution, by source of funds. In addition, schools are asked to provide the percentage of the total and the percentage of the federally financed expenditures that

are considered basic research. Also included are research funds for which an outside organization, educational or other, is a subrecipient. Care should be observed when interpreting data on source of funds; for example, industry R&D support is limited to grants and contracts for R&D activities from profit-making organizations. Total industry funds excludes research funded through unrestricted accounts and from corporate foundations, endowments, and fellowships to students; those funds would be included in an institution's own funding totals. An increasing number of institutions have links with industry and foundations via subcontracts, thus complicating the identification of funding source. In addition, institutional policy may determine whether unrestricted State support is reported as State or institutional funding.

Item 1A is a request for total and federally financed current fund expenditures for separately budgeted science and engineering R&D passed through the institution to subrecipients.

Item 1B is a request for total and federally financed current fund expenditures for separately budgeted science and engineering R&D received by the institution as a subrecipient.

Item 2 is a request for total and federally financed current fund expenditures for separately budgeted R&D activities by detailed S&E fields. When interpreting these data at the detailed discipline level, users should keep in mind that there is considerable interdisciplinary and multidisciplinary activity.

Item 3 is a request for the portions of total and federally financed expenditures reported in items 1 and 2 that were used for the purchase of research equipment out of current funds. This portion includes all research equipment purchased under sponsored research project awards and disbursed in the same detailed disciplines as in item 2. These data are of special interest to Federal and institutional policymakers in determining current funding levels for scientific research instrumentation.

ITEM 1A ANALYSIS

Item 1A was completed by 91.7 percent of the respondents from academic institutions. The total R&D expenditures passed through to subrecipients, $2.1 billion, represents 6.7 percent of item 1A respondents' total R&D expenditures and 5.7 percent of all separately budgeted R&D in FY 2002 (table 1). The doctorate-granting institutions reported a higher percentage of pass-through funds than the non-doctorate-granting institutions. Item 1A respondents from doctorate-granting institutions reported that $2.0 billion (6.7 percent) of their total R&D expenditures were passed through to subrecipients, versus $20 million (3.9 percent) of item 1A non-doctorate-granting respondents. Item 1A respondents from private institutions reported a higher percentage (8.1 percent) of pass-through funds than those from public institutions (5.9 percent).

Academic respondents to this question reported $1.8 billion in Federal R&D funds passed through to subrecipients. This amount represents 9.4 percent of the Federal support reported by item 1A respondents and 8.1 percent of the $22 billion in total Federal support (table 2).

Table A-6 shows the total amount of R&D expenditures passed through to subrecipients for the 100

TABLE 1. Item 1A summary of total academic R&D expenditures: FY 2002
(Dollars in thousands)

			R&D expenditures passed through to subrecipients		
Highest degree and control	All respondents' total R&D [1]	Item 1A respondents' total R&D[2]	Total [3]	Educational subrecipients	Other subrecipients
All academic institutions	36,127,882	30,689,763	2,056,336	938,563	656,429
Doctorate	35,541,373	30,170,188	2,036,264	927,011	649,377
Nondoctorate	586,509	519,575	20,072	11,552	7,052
Public	24,644,806	19,398,227	1,144,674	519,487	424,293
Private	11,483,076	11,291,536	911,662	419,076	232,136

[1] This total is the amount prior to imputation for nonrespondents.

[2] Item 1A measures the amount of R&D expenditures passed through the institution to subrecipients.

[3] Detail may not sum to totals due to rounding and because some institutions provided only total and Federal R&D expenditure data passed through to subrecipients.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, FY 2002.

TABLE 2. Item 1A summary of Federal academic R&D expenditures: FY 2002
(Dollars in thousands)

Highest degree and control	All respondents' Federal R&D [1]	Item 1A respondents' Federal R&D [2]	Federal R&D expenditures passed through to subrecipients: Total [3]	Educational subrecipients	Other subrecipients
All academic institutions	21,688,213	18,688,548	1,750,415	830,456	521,936
Doctorate	21,329,175	18,373,032	1,737,555	821,755	517,777
Nondoctorate	359,038	315,516	12,860	8,701	4,159
Public	13,228,939	10,382,195	970,027	459,249	352,371
Private	8,459,274	8,306,353	780,388	371,207	169,565

[1] This total is the amount prior to imputation for nonrespondents.

[2] Item 1A measures the amount of R&D expenditures passed through the institution to subrecipients.

[3] Detail may not sum to totals due to rounding and because some institutions provided only total and Federal R&D expenditure data passed through to subrecipients.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, FY 2002.

institutions reporting the highest amounts. Table A-7 shows the total amount of Federal R&D expenditures passed through to subrecipients for the 100 institutions reporting the highest amounts.

ITEM 1B ANALYSIS

This item was completed by 89.8 percent of the respondents from academic institutions. The total R&D expenditures received as subrecipients, $2.2 billion, represents 7.3 percent of the item 1B respondents' total R&D expenditures and 6.1 percent of all separately budgeted R&D in FY 2002 (table 3). The doctorate-granting institutions reported a lower percentage of funds received as subrecipients than the non-doctorate-granting institutions. Item 1B respondents from doctorate-granting institutions reported that $2.2 billion (7.3 percent) of their total R&D expenditures were received as subrecipients, versus $40 million (8.2 percent) of item 1B non-doctorate-granting respondents. Item 1B respondents from private institutions reported a slightly higher percentage (7.4 percent) of funds received as subrecipients than those from public institutions (7.2 percent).

Academic respondents to this question reported $1.9 billion in Federal R&D funds received as subrecipients. This amount represents 10.5 percent of the Federal support reported by item 1B respondents and 8.9 percent of the $22 billion in total Federal support (table 4).

Table A-8 shows the total amount of R&D expenditures received as subrecipients for the 100 institutions reporting the highest amounts. Table A-9 shows the total amount of Federal R&D expenditures received as subrecipients for the 100 institutions reporting the highest amounts.

TABLE 3. Item 1B summary of total academic R&D expenditures: FY 2002
(Dollars in thousands)

Highest degree and control	All respondents' total R&D [1]	Item 1B respondents' total R&D [2]	R&D expenditures received as a subrecipient: Total [3]	Higher education pass-through entities	Other passthrough entities
All academic institutions	36,127,882	29,973,497	2,190,853	897,447	927,285
Doctorate	35,541,373	29,484,300	2,150,888	878,562	906,205
Nondoctorate	586,509	489,197	39,965	18,885	21,080
Public	24,644,806	19,270,630	1,395,225	575,073	635,668
Private	11,483,076	10,702,867	795,628	322,374	291,617

[1] This total is the amount prior to imputation for nonrespondents.

[2] Item 1B measures the amount of R&D expenditures received as a subrecipient.

[3] Detail may not sum to totals due to rounding and because some institutions provided only total and Federal R&D expenditure data received as a

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, FY 2002.

TABLE 4. Item 1B summary of Federal academic R&D expenditures: FY 2002
(Dollars in thousands)

Highest degree and control	All respondents' Federal R&D [1]	Item 1B respondents' Federal R&D [2]	Federal R&D expenditures received as a subrecipient		
			Total [3]	Higher education pass-through entities	Other passthrough entities
All academic institutions	21,688,213	18,267,477	1,919,855	804,772	815,537
Doctorate	21,329,175	17,961,864	1,885,799	788,175	798,078
Nondoctorate	359,038	305,613	34,056	16,597	17,459
Public	13,228,939	10,393,544	1,189,843	509,021	552,114
Private	8,459,274	7,873,933	730,012	295,751	263,423

[1] This total is the amount prior to imputation for nonrespondents.

[2] Item 1B measures the amount of R&D expenditures received as a subrecipient.

[3] Detail may not sum to totals due to rounding and because some institutions provided only total and Federal R&D expenditure data received as a subrecipient.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, FY 2002.

Response Rate

The FY 2002 survey questionnaires were e-mailed in February 2003. Respondents could choose to submit an Adobe Portable Document Format questionnaire from the Web or use a Web-based data collection system to respond to the survey. Every effort was made to maintain close contact with respondents in order to preserve both consistency and continuity in the resultant data. Questionnaires were carefully examined for completeness upon receipt. Computerized facsimiles of the survey data were then prepared for each institution, comparing the current and 2 prior years of data and noting any substantive disparities. A personalized e-mail message was sent to the respondents so they could provide revisions before final processing and tabulation of the data. The e-mail message included a Web link to the academic R&D expenditures Web-based data collection system, allowing respondents to view and correct their data via the Web.

Respondents were asked to explain significant discrepancies between current and prior years' reporting patterns previously verified as correct. They were encouraged to correct prior years' data if anomalies were identified. When updated or amended figures covering past years were submitted, NSF changed trend data in this report and the underlying microdata database correspondingly. Similarly, if a respondent institution underwent an organizational change, such as a merger, NSF incorporated the effects of such changes into prior years' data.

By the survey closing date at the beginning of September 2003, forms had been received from 600 universities and colleges out of the academic population of 625, resulting in a 96.0 percent response rate. Responses were received from 97.8 percent of all doctorate-granting institutions, where 98.3 percent of the estimated national R&D expenditures in S&E fields was disbursed. Also, forms were received from all of the 36 FFRDCs. Table A-1 displays a detailed breakdown of the response rates by highest degree granted.

National Total and Imputation

To provide a national estimate for all universities and colleges performing R&D in FY 2002, it was necessary to implement two statistical procedures. First, data were estimated by "imputation" for the 25 institutions that had not responded by the closing date of the survey, using imputation techniques that have been used consistently since FY 1976. Second, data were also imputed for universities and colleges that submitted only partial responses. The imputed total was $205 million, or 0.6 percent of the $36 billion total R&D expenditures, as shown in table A-2.

Tables A-3a and A-3b present breakdowns of the total and Federal imputed amounts by S&E fields. The dollar amount imputed is displayed along with the percentage it represents of the national estimate for universities and colleges in a particular field. The amount imputed is similarly broken down by source of funds in table A-4.

A number of surveyed institutions have responded only intermittently in past years, providing data one year, not responding for one or more subsequent years, and then providing data again. For the years in which no response was received, data have been imputed as previously described. Although the imputation algorithm accurately reflects national trends, it cannot account for

specific trends at individual institutions. For this reason, a separate backcasting of prior years' data was performed, following current-year imputation.

For each institution, formerly imputed key variables for items 1 through 3 were recomputed to ensure that the imputed data accurately represent the growth patterns shown by reported data. If data were reported for fiscal years 1996 and 2002 but not for the intervening years, for example, the difference between the reported figures for each item total was calculated and evenly distributed across the intervening years (1997–2001). The new figures were spread across disciplines (items 2 and 3) or sources of support (item 1) on the basis of the most recent reporting pattern. A clean facsimile was generated for each of the institutions undergoing these procedures and returned to the school for comment. These procedures result in much more consistent reporting trends for individual institutions but have little effect upon aggregate figures reflecting national totals.

Changes in Basic Research Totals

The Division of Science Resources Statistics regularly reviews the methodologies used in its Survey of Research and Development Expenditures at Universities and Colleges with the goal of producing the most accurate statistics possible for researchers and policy makers. In FYs 2001 and 2002 a review of responses of total and Federal research funds that were basic research determined that the aggregate statistics could be improved by refining the imputation methodology for the item. For a number of reasons some universities and colleges are either unable or unwilling to respond to this item. Values must be imputed for them in order to present aggregate statistics.

In the past, if a respondent did not reply to the basic research items, the prior year's basic research share (whether reported by or imputed for the respondent) was carried forward. After interviews with respondents revealing that in some cases abnormal or erroneous values (such as zero percent basic research) were imputed forward for several years, a revised imputation methodology was introduced. The revised imputation methodology carries forward the prior year's basic research share only if that year's data were reported or estimated by the respondent. In all other cases an econometric model is used to impute the amount of total and Federal basic research for the respondent. The model employed takes into account differences between public and private institutions and non-Federal sources of R&D funding.

Data Anomalies

Aggregate academic expenditure data are generally consistent from year to year, although data for individual institutions may vary considerably. Data anomalies may reflect true increases or decreases in expenditures or may be the result of changes in reporting methodology. None were reported in FY 2002.

State Tables

The detailed statistical tables showing R&D expenditures at individual institutions by State provide detailed campus lists by control and source of funds in table B-29 and by control and science and engineering field in table B-31.

Highest Degree-Granted Tables

Several longitudinal tables display data for institutions whose highest S&E degree granted is at the doctoral level. In tables produced prior to FY 1992, it would have been difficult to identify whether changes in yearly R&D expenditures were caused by changes in expenditure levels or in the number of doctorate-granting institutions. In order to maintain a consistent group of institutions across all years in this report, the highest degree-granted status for each institution is based on the highest degree granted in the most recent year, FY 2002.

Data Availability

Data from this survey and previous reports are available on the Web at http://www.nsf.gov/sbe/srs/rdexp/.

Selected data items for institutions are available on the Web at http://www.nsf.gov/sbe/srs/profiles/start.htm. The institutional profiles cover data from this survey and data collected in NSF's other academic S&E surveys: the Survey of Graduate Students and Postdoctorates in Science and Engineering (graduate student survey) and the Survey of Federal Science and Engineering Support to Universities, Colleges, and Nonprofit Institutions (Federal S&E support survey). The profiles are also linked to the corresponding ranking table for each survey.

Data for these and other surveys are available through the Web-Based Computer-Aided Science Policy Analysis and Research (WebCASPAR) database system, which provides an extensive and growing data library with multiyear statistics on the state of higher education in general and on academic S&E resources specifically. This data library is based on a set of standard institutional

and field-of-science definitions across the multiple sources used to develop the database. The WebCASPAR program includes built-in help capabilities to facilitate the use and interpretation of the data. The latest version of WebCASPAR can be accessed via the Web at http://caspar.nsf.gov/webcaspar.

WebCASPAR data are drawn from a number of sources. All data are available for individual institutions, by State, and at the national level. Longitudinal data from surveys of universities and colleges conducted by the NSF Division of Science Resources Statistics include the academic R&D expenditures survey, the graduate student survey, and the Federal S&E support survey. Data included in WebCASPAR from the surveys of universities and colleges conducted by the National Center for Education Statistics include earned degrees, opening fall enrollment, tuition, faculty salaries, tenure and fringe benefits, and financial statistics.

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TABLE A-1. Response rates for the academic research and development expenditures survey, by respondent type and highest degree granted: fiscal year 2002

Respondent type and highest degree granted	Number in survey universe	Number of complete responses	Number of partial responses	Total number of responses	Response rate
Total	661	535	101	636	96.2
Universities and colleges	625	499	101	600	96.0
Doctorate	361	300	53	353	97.8
Master's	161	121	32	153	95.0
Bachelor's and below	103	78	16	94	91.3
All FFRDCs	36	36	0	36	100.0
University-administered FFRDCs	16	16	0	16	100.0
Industry-administered FFRDCs	4	4	0	4	100.0
Nonprofit-administered FFRDCs	16	16	0	16	100.0

FFRDC = federally funded research and development center.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE A-2. Imputed amounts for total research and development expenditures at universities and colleges, by highest degree granted: fiscal year 2002

(Dollars in millions)

Highest degree granted	Total separately budgeted R&D expenditures	Imputed amount	Imputed amount as percent of total
Total	36,333	205	0.6
Doctorate-granting institutions	35,714	173	0.5
Non-doctorate-granting institutions	619	32	5.2

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE A-3a. Imputed amounts for total research and development expenditures at universities and colleges, by science and engineering field: fiscal year 2002

(Dollars in millions)

Science and engineering field	Total separately budgeted R&D expenditures	Imputed amount	Imputed amount as percent of total
Total	36,333	205	0.6
Engineering	5,504	47	0.8
Aeronautical and astronautical	342	42	12.3
Bioengineering/biomedical	285	12	4.2
Chemical	430	15	3.4
Civil	721	14	1.9
Electrical	1,303	122	9.4
Mechanical	779	88	11.3
Metallurgical and materials	467	4	0.9
Other, nec	1,177	137	11.6
Physical sciences	3,008	29	1.0
Astronomy	402	0	0.1
Chemistry	1,129	21	1.9
Physics	1,282	18	1.4
Other, nec	196	2	0.9
Environmental sciences	2,022	39	1.9
Atmospheric	341	21	6.1
Earth sciences	645	39	6.0
Oceanography	719	37	5.2
Other, nec	317	61	19.3
Mathematical sciences	387	8	2.1
Computer sciences	1,126	10	0.9
Life sciences	21,404	138	0.6
Agricultural sciences	2,434	26	1.1
Biological sciences	6,578	69	1.0
Medical sciences	11,505	87	0.8
Other, nec	888	14	1.6
Psychology	671	3	0.4
Social sciences	1,583	23	1.4
Economics	284	9	3.0
Political science	271	3	1.0
Sociology	379	9	2.3
Other, nec	649	10	1.6
Other sciences, nec	627	30	4.7

nec = not elsewhere classified.

NOTES: The imputation rate at the total level is lower than the imputation rates at the S&E field levels because many institutions could provide totals but not the S&E field details. Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE A-3b. Imputed amounts for federally financed research and development expenditures at universities and colleges, by science and engineering field: fiscal year 2002

(Dollars in millions)

Science and engineering field	Total separately budgeted Federal R&D expenditures	Imputed amount	Imputed amount as percent of total
Total	21,834	146	0.7
Engineering	3,217	26	0.8
Aeronautical and astronautical	246	39	16.0
Bioengineering/biomedical	169	10	6.0
Chemical	229	11	4.7
Civil	308	9	3.0
Electrical	817	116	14.2
Mechanical	507	81	15.9
Metallurgical and materials	262	4	1.3
Other, nec	679	122	18.0
Physical sciences	2,124	17	0.8
Astronomy	277	0	0.1
Chemistry	737	12	1.6
Physics	971	12	1.2
Other, nec	139	1	0.7
Environmental sciences	1,294	28	2.2
Atmospheric	250	18	7.2
Earth sciences	374	30	8.1
Oceanography	486	32	6.6
Other, nec	184	50	26.9
Mathematical sciences	267	5	1.9
Computer sciences	770	8	1.0
Life sciences	12,852	92	0.7
Agricultural sciences	686	17	2.5
Biological sciences	4,406	46	1.1
Medical sciences	7,231	56	0.8
Other, nec	530	10	1.9
Psychology	474	2	0.4
Social sciences	616	14	2.2
Economics	101	5	5.2
Political science	76	1	1.6
Sociology	181	5	2.5
Other, nec	258	5	1.7
Other sciences, nec	220	11	5.1

nec = not elsewhere classified.

NOTES: The imputation rate at the total level is lower than the imputation rates at the S&E field levels because many institutions could provide totals but not the S&E field details. Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE A-4. Imputed amounts for research and development expenditures at universities and colleges, by source of funds: fiscal year 2002

(Dollars in millions)

Source of funds	Total separately budgeted R&D expenditures	Imputed amount	Imputed amount as percent of total
Total	36,333	205	0.6
Federal Government	21,834	146	0.7
State and local government	2,501	13	0.5
Industry	2,188	11	0.5
Institutional funds	7,109	28	0.4
All other sources	2,701	21	0.8

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE A-5. Number of surveyed institutions for the academic research and development expenditures survey, by respondent type and highest degree granted: fiscal years 1997--2002

Respondent type and highest degree granted	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
Total	511	572	614	639	644	661
Universities and colleges	493	555	597	623	608	625
Doctorate	343	357	359	362	358	361
Master's	84	118	148	162	158	161
Bachelor's and below	66	80	90	99	92	103
All FFRDCs	18	17	17	16	36	36
University-administered FFRDCs	18	17	17	16	16	16
Industry-administered FFRDCs	0	0	0	0	4	4
Nonprofit-administered FFRDCs	0	0	0	0	16	16

FFRDC = federally funded research and development center.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE A-6. Total amount of R&D expenditures passed through to subrecipients by universities and colleges, ranked by amount passed through: fiscal year 2002

(Dollars in thousands)

Institutions ranked by total amount of R&D expenditures passed through [1]	Total R&D expenditures	R&D expenditures passed through to subrecipients		
		Total	Educational subrecipients	Other subrecipients
Total, all institutions	36,332,641	2,069,979	950,136	658,499
1 Johns Hopkins U., The	1,140,235	98,054	--	--
2 Stanford U.	538,474	61,876	--	--
3 U. MD College Park	324,980	57,380	0	57,380
4 Harvard U.	401,367	55,755	20,713	35,042
5 Duke U.	441,533	50,939	35,358	15,581
6 U. MI all campuses	673,724	49,101	32,170	16,931
7 U. PA	522,269	48,435	31,777	16,658
8 Columbia U. in the City of New York	405,403	43,471	24,344	19,127
9 U. NC Chapel Hill	370,806	42,940	17,131	25,809
10 U. Southern CA	372,397	40,274	15,318	24,956
Total, 1st 10 institutions	5,191,188	548,225	176,811	211,484
11 U. MN all campuses	494,265	39,463	--	--
12 U. CO all campuses	399,818	38,627	17,293	21,334
13 U. WI Madison	662,101	32,267	21,874	10,393
14 Baylor C. of Medicine	411,924	30,726	27,381	3,345
15 MA Institute of Technology	455,491	27,234	16,030	11,204
16 CA Institute of Technology	220,004	27,077	27,077	0
17 U. IL Urbana-Champaign	427,174	27,063	20,295	6,768
18 U. Pittsburgh all campuses	400,200	26,338	14,223	12,115
19 U. Chicago	225,264	23,768	18,426	5,342
20 GA Institute of Technology all campuses	340,347	23,054	--	--
Total, 1st 20 institutions	9,227,776	843,842	339,410	281,985
21 U. HI Manoa	161,823	22,458	5,508	16,950
22 Yale U.	354,243	22,295	--	--
23 OH State U. all campuses	432,387	22,217	11,048	11,169
24 Northwestern U.	282,154	21,305	--	--
25 Cornell U. all campuses	496,123	21,011	--	--
26 U. AL Birmingham, The	255,053	19,530	--	--
27 U. South FL	197,894	19,325	--	--
28 Carnegie-Mellon U.	188,191	17,685	11,096	6,589
29 Rutgers The State U. NJ, all campuses	258,829	17,172	13,333	3,839
30 U. AZ	390,827	17,169	--	--
Total, 1st 30 institutions	12,245,300	1,044,009	380,395	320,532
31 U. TX Southwestern Medical Ctr. Dallas	263,958	17,156	1,473	15,683
32 Boston U.	192,612	17,085	8,937	8,148
33 Washington U. St. Louis	416,960	17,020	11,975	5,045
34 U. FL	386,316	16,811	15,130	1,681
35 MS State U.	158,652	16,674	13,555	3,119

See explanatory information and SOURCE at end of table.

TABLE A-6. Total amount of R&D expenditures passed through to subrecipients by universities and colleges, ranked by amount passed through: fiscal year 2002

(Dollars in thousands)

Institutions ranked by total amount of R&D expenditures passed through [1]	Total R&D expenditures	R&D expenditures passed through to subrecipients		
		Total	Educational subrecipients	Other subrecipients
36 U. TX Houston Health Science Ctr.	138,380	16,175	10,623	5,552
37 Case Western Reserve U.	219,042	15,539	15,539	0
38 NC State U.	290,018	15,294	10,016	5,278
39 Purdue U. all campuses	285,778	15,236	9,520	5,716
40 Vanderbilt U.	208,305	14,857	9,066	5,791
Total, 1st 40 institutions	14,805,321	1,205,856	486,229	376,545
41 IN U. all campuses	299,080	14,263	11,239	3,024
42 U. UT	216,707	14,103	7,757	6,346
43 U. AK Fairbanks all campuses	116,279	14,020	--	--
44 NM State U. all campuses	103,078	13,881	4,085	9,796
45 U. IA	288,808	13,734	--	--
46 U. MS all campuses	67,838 i	13,643e	11,573e	2,070e
47 MI State U.	289,787	13,371	9,419	3,952
48 Emory U.	271,238	13,275	8,657	4,618
49 Princeton U.	164,408	13,227	8,572	4,655
50 Dartmouth C.	126,839	13,188	6,557	6,631
Total, 1st 50 institutions	16,749,383	1,342,561	554,088	417,637
51 U. Rochester	261,601	13,151	7,879	5,272
52 Mt. Sinai School of Medicine	185,335	13,068	13,068	0
53 U. NH	93,222	12,879	--	--
54 U. IL Chicago	259,852	12,631	6,174	6,457
55 U. GA	284,660	12,191	--	--
56 NY U.	222,978	11,864	9,961	1,903
57 FL State U.	134,351	11,810	2,481	9,329
58 Wake Forest U.	111,634	11,645	--	--
59 VA Polytechnic Institute & State U.	232,560	11,635	6,080	5,555
60 U. VA all campuses	182,340	11,526	7,631	3,895
Total, 1st 60 institutions	18,717,916	1,464,961	607,362	450,048
61 U. KY all campuses	236,275	11,389	11,389	0
62 Eastern VA Medical School	28,572	11,281	3,472	7,809
63 Drexel U.	44,465	11,066	--	--
64 U. Miami	171,319	11,050	4,705	6,345
65 U. TX M. D. Anderson Cancer Ctr.	262,145	10,821	7,744	3,077
66 U. TX Austin	320,966	10,586	5,010	5,576
67 U. NE Lincoln	171,431	10,079	4,876	5,203
68 U. TX Health Science Ctr. San Antonio	129,616	9,585	3,798	5,787
69 U. Cincinnati all campuses	217,739	9,296	3,815	5,481
70 George Washington U.	86,288	9,201	2,929	6,272
Total, 1st 70 institutions	20,386,732	1,569,315	655,100	495,598
71 OR State U.	161,735	8,910	6,371	2,539
72 U. of Medicine and Dentistry NJ	178,156	8,888	8,888	0
73 SUNY Stony Brook all campuses	184,045	8,841	--	--
74 Wayne State U.	199,007	8,812	5,689	3,123
75 U. MO-Columbia	177,011	8,521	4,431	4,090

See explanatory information and SOURCE at end of table.

TABLE A-6. Total amount of R&D expenditures passed through to subrecipients by universities and colleges, ranked by amount passed through: fiscal year 2002

(Dollars in thousands)

Institutions ranked by total amount of R&D expenditures passed through [1]	Total R&D expenditures	R&D expenditures passed through to subrecipients		
		Total	Educational subrecipients	Other subrecipients
76 U. CT all campuses	172,003	8,461	4,967	3,494
77 U. NM all campuses	150,598	8,460	6,853	1,607
78 OR Health Sciences U.	158,729	8,431	2,783	5,648
79 Rockefeller U.	166,603	8,251	8,251	0
80 Auburn U. all campuses	108,775	8,221	5,641	2,580
Total, 1st 80 institutions	22,043,394	1,655,111	708,974	518,679
81 U. TN System	188,261	8,130	4,083	4,047
82 U. TX Medical Branch Galveston	129,534	7,851	2,173	5,678
83 U. KS all campuses	172,131	7,768	5,641	2,127
84 U. AL, The	37,130	7,738	6,978	760
85 Yeshiva U.	157,124	7,666	7,666	0
86 Brown U.	109,482	7,608	--	--
87 SUNY Buffalo all campuses	239,735	7,415	5,130	2,285
88 AZ State U. main campus	123,016	7,327	3,714	3,613
89 U. Dayton	46,554	7,320	732	6,588
90 NM Institute of Mining and Technology	36,309	7,064	912	6,152
Total, 1st 90 institutions	23,282,670	1,730,998	746,003	549,929
91 U. TX El Paso	23,684	6,861	3,615	3,246
92 LA State U. all campuses	287,363	6,624	5,312	1,312
93 U. MA Worcester	132,729	6,606	6,606	0
94 MT State U.-Bozeman	78,211	6,605	--	--
95 U. Louisville	80,974	6,578	3,947	2,631
96 Tulane U.	102,998	6,554	4,953	1,601
97 San Diego State U.	64,302	6,317	4,062	2,255
98 U. OK all campuses	169,373	6,262	3,740	2,522
99 TX A&M U. all campuses	436,681	6,207	5,042	1,165
100 Rice U.	48,169	6,198	5,727	471
Total, 1st 100 institutions	24,707,154	1,795,810	789,007	565,132
Total, all other sampled institutions	11,625,487	274,169	161,129	93,367

-- = not available.
e = estimated.
i = imputed.

[1] Only the top 100 institutions that reported the largest amount of passed through funds are shown in this table.

NOTE: Because of rounding, detail may not add to totals. Also, detail may not add to totals because some respondents reporting total R&D funds passed through did not break out these funds by type of subrecipient (educational or other).

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE A-7. Total amount of Federal R&D expenditures passed through to subrecipients by universities and colleges, ranked by amount passed through: fiscal year 2002

(Dollars in thousands)

Institutions ranked by total amount of Federal R&D expenditures passed through [1]	Federal R&D expenditures	Federal R&D expenditures passed through		
		Total	Educational subrecipients	Other subrecipients
Total, all institutions	21,833,953	1,763,402	841,373	524,006
1 Johns Hopkins U., The	1,022,510	92,027	--	--
2 Stanford U.	426,620	58,660	--	--
3 U. MD College Park	194,095	47,271	0	47,271
4 Harvard U.	336,607	45,083	20,382	24,701
5 U. NC Chapel Hill	254,571	42,531	16,834	25,697
6 Columbia U. in the City of New York	356,749	42,024	23,533	18,491
7 U. MI all campuses	444,255	39,287	26,206	13,081
8 U. MN all campuses	295,301	37,086	--	--
9 U. CO all campuses	340,466	36,580	17,018	19,562
10 U. Southern CA	266,645	36,416	14,201	22,215
Total, 1st 10 institutions	3,937,819	476,965	118,174	171,018
11 Duke U.	261,356	33,512	33,512	0
12 U. PA	397,587	32,787	18,839	13,948
13 U. WI Madison	345,003	30,655	20,867	9,788
14 Baylor C. of Medicine	259,475	29,555	26,755	2,800
15 CA Institute of Technology	199,944	27,077	27,077	0
16 U. IL Urbana-Champaign	214,323	23,513	17,120	6,393
17 U. Chicago	183,830	22,770	17,602	5,168
18 U. HI Manoa	110,882	22,458	5,508	16,950
19 U. Pittsburgh all campuses	306,913	21,885	11,162	10,723
20 Cornell U. all campuses	270,578	20,353	--	--
Total, 1st 20 institutions	6,487,710	741,530	296,616	236,788
21 Yale U.	274,304	19,480	--	--
22 MA Institute of Technology	330,409	19,478	10,453	9,025
23 U. AL Birmingham, The	216,221	18,563	--	--
24 Northwestern U.	178,607	18,476	--	--
25 U. TX Southwestern Medical Ctr. Dallas	155,258	17,156	1,473	15,683
26 Boston U.	171,438	17,085	8,937	8,148
27 OH State U. all campuses	177,883	16,934	10,186	6,748
28 MS State U.	77,521	16,327	13,242	3,085
29 U. South FL	84,108	16,067	--	--
30 U. AZ	211,772	15,584	--	--
Total, 1st 30 institutions	8,365,231	916,680	340,907	279,477
31 Washington U. St. Louis	303,441	15,574	11,437	4,137
32 U. TX Houston Health Science Ctr	98,676	15,393	9,900	5,493
33 U. FL	167,108	14,671	13,204	1,467
34 U. UT	142,625	14,015	7,708	6,307
35 Carnegie-Mellon U.	137,967	13,998	8,021	5,977

See explanatory information and SOURCE at end of table.

TABLE A-7. Total amount of Federal R&D expenditures passed through to subrecipients by universities and colleges, ranked by amount passed through: fiscal year 2002

(Dollars in thousands)

Institutions ranked by total amount of Federal R&D expenditures passed through [1]	Federal R&D expenditures	Federal R&D expenditures passed through		
		Total	Educational subrecipients	Other subrecipients
36 Case Western Reserve U.	181,888	13,501	13,501	0
37 Rutgers The State U. NJ, all campuses	91,205	13,323	11,370	1,953
38 NM State U. all campuses	70,314	13,308	4,085	9,223
39 Mt. Sinai School of Medicine	125,979	13,068	13,068	0
40 U. MS all campuses	50,092 i	12,987e	10,917e	2,070e
Total, 1st 40 institutions	9,734,526	1,056,518	444,118	316,104
41 U. AK Fairbanks all campuses	66,169	12,790	--	--
42 U. IA	180,743	12,538	--	--
43 Vanderbilt U.	172,858	12,071	8,399	3,672
44 Emory U.	186,083	11,940	8,404	3,536
45 U. NH	50,829	11,927	--	--
46 IN U. all campuses	132,759	11,805	8,856	2,949
47 NY U.	149,995	11,702	9,961	1,741
48 MI State U.	122,595	11,323	8,382	2,941
49 FL State U.	70,456	11,311	2,221	9,090
50 U. VA all campuses	152,358	11,196	7,441	3,755
Total, 1st 50 institutions	11,019,371	1,175,121	497,782	343,788
51 Dartmouth C.	87,255	11,146	6,139	5,007
52 Purdue U. all campuses	107,477	11,107	8,225	2,882
53 U. TX M. D. Anderson Cancer Ctr.	117,633	10,821	7,744	3,077
54 Drexel U.	30,232	10,760	--	--
55 U. GA	78,086	10,569	--	--
56 U. Rochester	195,298	10,235	6,927	3,308
57 NC State U.	75,204	10,220	6,862	3,358
58 U. NE Lincoln	51,405	9,802	4,758	5,044
59 Wake Forest U.	91,738	9,647	--	--
60 U. TX Health Science Ctr. San Antonio	83,761	9,585	3,798	5,787
Total, 1st 60 institutions	11,937,460	1,279,013	542,235	372,251
61 Princeton U.	97,724	9,518	7,665	1,853
62 U. Cincinnati all campuses	150,166	9,293	3,815	5,478
63 VA Polytechnic Institute & State U.	82,976	9,256	5,513	3,743
64 U. IL Chicago	143,183	9,102	5,541	3,561
65 U. of Medicine and Dentistry NJ	90,235	8,888	8,888	0
66 U. TX Austin	219,158	8,707	4,464	4,243
67 U. KY all campuses	100,426	8,654	8,654	0
68 Auburn U. all campuses	42,432	8,221	5,641	2,580
69 Rockefeller U.	67,559	8,087	8,087	0
70 U. NM all campuses	104,252	8,014	6,714	1,300
Total, 1st 70 institutions	13,035,571	1,366,753	607,217	395,009
71 OR Health Sciences U.	130,231	7,840	2,747	5,093
72 Yeshiva U.	114,268	7,666	7,666	0
73 U. CT all campuses	93,326	7,439	4,460	2,979
74 SUNY Stony Brook all campuses	108,122	7,397	--	--
75 U. MO-Columbia	77,742	7,327	3,810	3,517

See explanatory information and SOURCE at end of table.

TABLE A-7. Total amount of Federal R&D expenditures passed through to subrecipients by universities and colleges, ranked by amount passed through: fiscal year 2002

(Dollars in thousands)

Institutions ranked by total amount of Federal R&D expenditures passed through [1]	Federal R&D expenditures	Federal R&D expenditures passed through		
		Total	Educational subrecipients	Other subrecipients
76 U. KS all campuses	82,663	7,299	5,438	1,861
77 George Washington U.	58,729	7,291	2,291	5,000
78 U. Dayton	40,191	7,250	725	6,525
79 U. AL, The	26,900	6,989	6,653	336
80 Wayne State U.	95,910	6,949	5,103	1,846
Total, 1st 80 institutions	13,863,653	1,440,200	646,110	422,166
81 AZ State U. main campus	64,407	6,912	3,460	3,452
82 Brown U.	68,215	6,877	--	--
83 U. Miami	121,171	6,648	3,890	2,758
84 NM Institute of Mining and Technology	18,864	6,626	855	5,771
85 SUNY Buffalo all campuses	128,842	6,626	4,745	1,881
86 U. MA Worcester	93,992	6,341	6,341	0
87 Rice U.	39,739	6,108	5,637	471
88 U. TX El Paso	16,457	5,952	3,501	2,451
89 U. TN System	88,344	5,912	4,019	1,893
90 OR State U.	91,683	5,891	3,985	1,906
Total, 1st 90 institutions	14,595,367	1,504,093	682,543	442,749
91 Tulane U.	64,824	5,741	4,929	812
92 TX A&M U. all campuses	163,488	5,633	4,881	752
93 WV U.	49,394	5,475	2,965	2,510
94 Clemson U.	47,174	5,431	4,978	453
95 LA State U. all campuses	97,928	5,027	4,259	768
96 WA State U.	56,360	4,909	3,068	1,841
97 U. TX Medical Branch Galveston	78,100	4,851	2,173	2,678
98 MT State U.-Bozeman	39,986	4,624	--	--
99 Medical U. SC	75,803	4,609	1,252	3,357
100 U. AL Huntsville, The	35,660	4,584	2,222	2,362
Total, 1st 100 institutions	15,304,084	1,554,977	713,270	458,282
Total, all other sampled institutions	6,529,869	208,425	128,103	65,724

-- = not available.
e = estimated.
i = imputed.

[1] Only the top 100 institutions that reported the largest amount of passed through funds are shown in this table.

NOTE: Because of rounding, detail may not add to totals. Also, detail may not add to totals because some respondents reporting Federal R&D funds passed through did not break out these funds by type of subrecipient (educational or other).

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE A-8. Total amount of R&D expenditures received as a subrecipient by universities and colleges, ranked by amount received: fiscal year 2002

(Dollars in thousands)

Institutions ranked by total amount of R&D expenditures received as a subrecipient [1]	Total R&D expenditures	R&D expenditures received as a subrecipient		
		Total	Educational pass-through entities	Other pass-through entities
Total, all institutions	36,332,641	2,194,923	900,970	927,832
1 U. MI all campuses	673,724	66,459	35,694	30,765
2 TX A&M U. all campuses	436,681	63,458	52,271	11,187
3 MA Institute of Technology	455,491	60,776	23,888	36,888
4 Stanford U.	538,474	59,062	--	--
5 OH State U. all campuses	432,387	45,140	18,871	26,269
6 Johns Hopkins U., The	1,140,235	42,015	--	--
7 U. CO all campuses	399,818	39,680	17,669	22,011
8 Harvard U.	401,367	37,723	14,232	23,491
9 Columbia U. in the City of New York	405,403	37,655	17,884	19,771
10 U. WI Madison	662,101	36,602	17,309	19,293
Total, 1st 10 institutions	5,545,681	488,570	197,818	189,675
11 U. TX Austin	320,966	36,479	14,903	21,576
12 U. AZ	390,827	34,718	--	--
13 U. Southern CA	372,397	31,728	16,624	15,104
14 U. IL Urbana-Champaign	427,174	31,074	12,122	18,952
15 CA Institute of Technology	220,004	29,811	29,811	0
16 Cornell U. all campuses	496,123	28,975	12,454	16,521
17 U. MN all campuses	494,265	28,879	--	--
18 GA Institute of Technology all campuses	340,347	28,718	--	--
19 U. Pittsburgh all campuses	400,200	25,988	--	--
20 Northwestern U.	282,154	25,891	--	--
Total, 1st 20 institutions	9,290,138	790,831	283,732	261,828
21 U. MD College Park	324,980	24,928	7,014	17,914
22 Rutgers The State U. NJ, all campuses	258,829	23,348	13,335	10,013
23 Washington U. St. Louis	416,960	22,780	9,679	13,101
24 Emory U.	271,238	22,704	8,747	13,957
25 U. Chicago	225,264	21,733	11,544	10,189
26 U. FL	386,316	21,600	7,126	14,474
27 U. AL Birmingham, The	255,053	21,054	14,467	6,587
28 Purdue U. all campuses	285,778	20,786	5,642	15,144
29 Yale U.	354,243	20,399	--	--
30 U. NC Chapel Hill	370,806	20,027	12,861	7,166
Total, 1st 30 institutions	12,439,605	1,010,190	374,147	370,373
31 FL State U.	134,351	19,971	3,528	16,443
32 U. Rochester	261,601	19,743	--	--
33 U. UT	216,707	18,824	7,992	10,832
34 Carnegie-Mellon U.	188,191	18,258	7,867	10,391
35 Boston U.	192,612	17,974	10,037	7,937

See explanatory information and SOURCE at end of table.

TABLE A-8. Total amount of R&D expenditures received as a subrecipient by universities and colleges, ranked by amount received: fiscal year 2002

(Dollars in thousands)

Institutions ranked by total amount of R&D expenditures received as a subrecipient [1]	Total R&D expenditures	R&D expenditures received as a subrecipient		
		Total	Educational pass-through entities	Other pass-through entities
36 LA State U. all campuses	287,363	17,065	9,837	7,228
37 U. NM all campuses	150,598	16,928	5,408	11,520
38 U. OK all campuses	169,373	16,709	3,977	12,732
39 U. KY all campuses	236,275	16,619	3,652	12,967
40 U. HI Manoa	161,823	16,460	3,510	12,950
Total, 1st 40 institutions	14,438,499	1,188,741	429,955	473,373
41 VA Polytechnic Institute & State U.	232,560	15,970	5,701	10,269
42 U. AK Fairbanks all campuses	116,279	15,830	--	--
43 AZ State U. main campus	123,016	15,753	5,253	10,500
44 PA State U. all campuses	492,739	15,310	15,310	0
45 IN U. all campuses	299,080	14,906	8,007	6,899
46 U. IL Chicago	259,852	14,137	6,959	7,178
47 Auburn U. all campuses	108,775	14,117	5,817	8,300
48 MI State U.	289,787	13,994	6,177	7,817
49 OR State U.	161,735	13,909	7,795	6,114
50 Tulane U.	102,998	13,520	3,858	9,662
Total, 1st 50 institutions	16,625,320	1,336,187	494,832	540,112
51 Case Western Reserve U.	219,042	13,200	13,200	0
52 Vanderbilt U.	208,305	12,977	8,081	4,896
53 George Washington U.	86,288	12,907	3,615	9,292
54 NC State U.	290,018	12,411	8,841	3,570
55 U. CT all campuses	172,003	11,996	4,947	7,049
56 U. KS all campuses	172,131	11,979	4,955	7,024
57 Princeton U.	164,408	11,969	10,165	1,804
58 Catholic U. America	22,883	11,734	356	11,378
59 MT State U.-Bozeman	78,211	11,731	--	--
60 U. IA	288,808	11,387	--	--
Total, 1st 60 institutions	18,327,417	1,458,478	548,992	585,125
61 U. NH	93,222	10,831	3,186	7,645
62 MS State U.	158,652	10,428	4,083	6,345
63 U. TX M. D. Anderson Cancer Ctr.	262,145	10,296	6,991	3,305
64 Baylor C. of Medicine	411,924	10,233	7,317	2,916
65 Duke U.	441,533	10,191	8,538	1,653
66 Mt. Sinai School of Medicine	185,335	10,160	143	10,017
67 U. TX Houston Health Science Ctr.	138,380	10,121	7,912	2,209
68 WV U.	84,985	10,068	2,553	7,515
69 U. NV, Reno	66,721	9,959	7,568	2,391
70 NY U.	222,978	9,888	5,147	4,741
Total, 1st 70 institutions	20,393,292	1,560,653	602,430	633,862
71 OK State U. all campuses	94,987	9,785	--	--
72 U. MO-Columbia	177,011	9,601	4,360	5,241
73 Clark Atlanta U.	17,194	9,585	1,092	8,493
74 Wayne State U.	199,007	9,348	4,648	4,700
75 OR Health Sciences U.	158,729	9,219	3,720	5,499

See explanatory information and SOURCE at end of table.

TABLE A-8. Total amount of R&D expenditures received as a subrecipient by universities and colleges, ranked by amount received: fiscal year 2002

(Dollars in thousands)

Institutions ranked by total amount of R&D expenditures received as a subrecipient [1]	Total R&D expenditures	R&D expenditures received as a subrecipient		
		Total	Educational pass-through entities	Other pass-through entities
76 U. SC all campuses	123,108	9,204	3,910	5,294
77 Rice U.	48,169	9,165	8,071	1,094
78 U. TX Southwestern Medical Ctr. Dallas	263,958	8,788	1,380	7,408
79 SUNY Albany	67,493	8,569	2,826	5,743
80 U. Cincinnati all campuses	217,739	8,311	2,253	6,058
Total, 1st 80 institutions	21,760,687	1,652,228	634,690	683,392
81 U. ME	62,149	8,232	1,850	6,382
82 WA State U.	112,469	8,212	3,785	4,427
83 SUNY Stony Brook all campuses	184,045	8,193	4,562	3,631
84 U. NE Lincoln	171,431	8,102	2,390	5,712
85 U. Southern MS	25,685	7,892	5,998	1,894
86 NM State U. all campuses	103,078	7,813	2,295	5,518
87 U. DE	85,157	7,756	2,884	4,872
88 Medical U. SC	132,030	7,685	1,905	5,780
89 U. TX Health Science Ctr. San Antonio	129,616	7,639	3,162	4,477
90 KS State U.	106,804	7,551	5,425	2,126
Total, 1st 90 institutions	22,873,151	1,731,303	668,946	728,211
91 Thomas Jefferson U.	102,974	7,524	4,625	2,899
92 Dartmouth C.	126,839	7,442	5,119	2,323
93 Brown U.	109,482	7,375	3,824	3,551
94 Tufts U.	109,291	6,936	3,335	3,601
95 Woods Hole Oceanographic Institution	99,964	6,925	6,925	0
96 U. AL Huntsville, The	48,353	6,771	4,106	2,665
97 U. AL, The	37,130	6,657	3,516	3,141
98 U. Miami	171,319	6,503	3,608	2,895
99 U. Memphis, The	33,625	6,499	1,929	4,570
100 U. GA	284,660	6,496	--	--
Total, 1st 100 institutions	23,996,788	1,800,431	705,933	753,856
Total, all other sampled institutions	12,335,853	394,492	195,037	173,976

-- = not available.

[1] Only the top 100 institutions that reported the largest amount of R&D expenditures received as a subrecipient are shown in this table.

NOTE: Because of rounding, detail may not add to totals. Also, detail may not add to totals because some respondents reporting total R&D funds received as a subrecipient did not break out these funds by type of pass-through entity (educational or other).

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE A-9. Total amount of Federal R&D expenditures received as a subrecipient by universities and colleges, ranked by amount received: fiscal year 2002

(Dollars in thousands)

Institutions ranked by total amount of Federal R&D expenditures received as a subrecipient [1]	Federal R&D expenditures	Federal R&D expenditures received as a subrecipient		
		Total	Educational pass-through entities	Other pass-through entities
Total, all institutions	21,833,953	1,923,732	808,114	816,072
1 TX A&M U. all campuses	163,488	62,749	51,864	10,885
2 U. MI all campuses	444,255	60,974	33,183	27,791
3 Stanford U.	426,620	58,214	--	--
4 MA Institute of Technology	330,409	55,330	22,117	33,213
5 Johns Hopkins U., The	1,022,510	42,015	--	--
6 U. CO all campuses	340,466	39,495	17,526	21,969
7 U. WI Madison	345,003	36,602	17,309	19,293
8 U. TX Austin	219,158	36,479	14,903	21,576
9 Columbia U. in the City of New York	356,749	36,370	16,999	19,371
10 Harvard U.	336,607	35,917	13,170	22,747
Total, 1st 10 institutions	3,985,265	464,145	187,071	176,845
11 U. AZ	211,772	34,717	--	--
12 CA Institute of Technology	199,944	29,811	29,811	0
13 U. IL Urbana-Champaign	214,323	28,311	10,984	17,327
14 Cornell U. all campuses	270,578	27,477	10,956	16,521
15 U. MN all campuses	295,301	26,459	--	--
16 U. Pittsburgh all campuses	306,913	24,685	--	--
17 U. Southern CA	266,645	24,097	14,277	9,820
18 Northwestern U.	178,607	22,310	--	--
19 Washington U. St. Louis	303,441	22,207	9,525	12,682
20 Rutgers The State U. NJ, all campuses	91,205	21,312	12,326	8,986
Total, 1st 20 institutions	6,323,994	725,531	274,950	242,181
21 U. AL Birmingham, The	216,221	21,054	14,467	6,587
22 U. Chicago	183,830	20,581	11,031	9,550
23 Yale U.	274,304	20,399	--	--
24 FL State U.	70,456	19,971	3,528	16,443
25 Emory U.	186,083	18,671	8,447	10,224
26 U. NC Chapel Hill	254,571	18,259	11,700	6,559
27 U. FL	167,108	18,234	6,905	11,329
28 U. UT	142,625	18,172	7,715	10,457
29 U. MD College Park	194,095	18,083	5,952	12,131
30 Boston U.	171,438	17,974	10,037	7,937
Total, 1st 30 institutions	8,184,725	916,929	354,732	333,398
31 Carnegie-Mellon U.	137,967	17,886	7,837	10,049
32 U. Rochester	195,298	17,168	--	--
33 U. NM all campuses	104,252	16,928	5,408	11,520
34 U. OK all campuses	69,388	16,709	3,977	12,732
35 U. KY all campuses	100,426	16,619	3,652	12,967

See explanatory information and SOURCE at end of table.

TABLE A-9. Total amount of Federal R&D expenditures received as a subrecipient by universities and colleges, ranked by amount received: fiscal year 2002

(Dollars in thousands)

Institutions ranked by total amount of Federal R&D expenditures received as a subrecipient [1]	Federal R&D expenditures	Federal R&D expenditures received as a subrecipient		
		Total	Educational pass-through entities	Other pass-through entities
36 U. HI Manoa	110,882	16,460	3,510	12,950
37 VA Polytechnic Institute & State U.	82,976	15,970	5,701	10,269
38 AZ State U. main campus	64,407	14,983	4,879	10,104
39 U. IL Chicago	143,183	14,137	6,959	7,178
40 Auburn U. all campuses	42,432	14,117	5,817	8,300
Total, 1st 40 institutions	9,235,936	1,077,906	402,472	429,467
41 OR State U.	91,683	13,909	7,795	6,114
42 IN U. all campuses	132,759	13,786	6,887	6,899
43 Case Western Reserve U.	181,888	13,200	13,200	0
44 Vanderbilt U.	172,858	12,977	8,081	4,896
45 Tulane U.	64,824	12,705	3,258	9,447
46 MI State U.	122,595	12,479	6,137	6,342
47 NC State U.	75,204	12,411	8,841	3,570
48 Purdue U. all campuses	107,477	12,082	5,642	6,440
49 U. CT all campuses	93,326	11,996	4,947	7,049
50 U. KS all campuses	82,663	11,936	4,955	6,981
Total, 1st 50 institutions	10,361,213	1,205,387	472,215	487,205
51 Catholic U. America	17,925	11,734	356	11,378
52 U. IA	180,743	11,387	--	--
53 Princeton U.	97,724	11,270	9,466	1,804
54 U. NH	50,829	10,831	3,186	7,645
55 MS State U.	77,521	10,368	4,024	6,344
56 U. TX M. D. Anderson Cancer Ctr.	117,633	10,296	6,991	3,305
57 Baylor C. of Medicine	259,475	10,233	7,317	2,916
58 Mt. Sinai School of Medicine	125,979	10,160	143	10,017
59 U. TX Houston Health Science Ctr.	98,676	10,121	7,912	2,209
60 WV U.	49,394	10,068	2,553	7,515
Total, 1st 60 institutions	11,437,112	1,311,855	514,163	540,338
61 U. NV, Reno	39,958	9,959	7,568	2,391
62 OK State U. all campuses	31,100	9,650	--	--
63 U. MO-Columbia	77,742	9,601	4,360	5,241
64 Clark Atlanta U.	15,325	9,569	1,076	8,493
65 Wayne State U.	95,910	9,348	4,648	4,700
66 U. SC all campuses	53,403	9,204	3,910	5,294
67 Rice U.	39,739	9,165	8,071	1,094
68 NY U.	149,995	8,411	5,147	3,264
69 SUNY Stony Brook all campuses	108,122	8,193	4,562	3,631
70 WA State U.	56,360	8,048	3,785	4,263
Total, 1st 70 institutions	12,104,766	1,403,003	557,290	578,709
71 OR Health Sciences U.	130,231	8,045	3,479	4,566
72 U. Cincinnati all campuses	150,166	7,998	2,110	5,888
73 MT State U.-Bozeman	39,986	7,978	--	--
74 NM State U. all campuses	70,314	7,813	2,295	5,518
75 U. DE	48,183	7,756	2,884	4,872

See explanatory information and SOURCE at end of table.

TABLE A-9. Total amount of Federal R&D expenditures received as a subrecipient by universities and colleges, ranked by amount received: fiscal year 2002

(Dollars in thousands)

Institutions ranked by total amount of Federal R&D expenditures received as a subrecipient [1]	Federal R&D expenditures	Federal R&D expenditures received as a subrecipient		
		Total	Educational pass-through entities	Other pass-through entities
76 U. NE Lincoln	51,405	7,728	2,227	5,501
77 Medical U. SC	75,803	7,641	1,905	5,736
78 U. TX Health Science Ctr. San Antonio	83,761	7,639	3,162	4,477
79 KS State U.	43,988	7,551	5,425	2,126
80 Thomas Jefferson U.	79,217	7,509	4,610	2,899
Total, 1st 80 institutions	12,877,820	1,480,661	585,387	620,292
81 U. Southern MS	22,398	7,455	5,561	1,894
82 Dartmouth C.	87,255	7,442	5,119	2,323
83 Brown U.	68,215	7,375	3,824	3,551
84 U. TX Southwestern Medical Ctr. Dallas	155,258	7,293	1,380	5,913
85 Woods Hole Oceanographic Institution	78,458	6,925	6,925	0
86 U. AL Huntsville, The	35,660	6,638	4,025	2,613
87 U. AL, The	26,900	6,638	3,497	3,141
88 SUNY Albany	40,497	6,563	2,360	4,203
89 U. Memphis, The	14,072	6,499	1,929	4,570
90 U. GA	78,086	6,496	--	--
Total, 1st 90 institutions	13,484,619	1,549,985	620,007	648,500
91 NM Institute of Mining and Technology	18,864	6,466	1,632	4,834
92 U. ID	33,465	6,290	1,830	4,460
93 MI Technological U.	17,973	6,095	--	--
94 Howard U.	33,949	6,040	--	--
95 Rensselaer Polytechnic Institute	26,490	6,039	3,633	2,406
96 U. Miami	121,171	5,956	3,087	2,869
97 Tufts U.	73,236	5,858	3,099	2,759
98 Old Dominion U.	17,170	5,827	2,512	3,315
99 George Washington U.	58,729	5,770	1,139	4,631
100 MCP Hahnemann U.	26,619	5,575	2,005	3,570
Total, 1st 100 institutions	13,912,285	1,609,901	638,944	677,344
Total, all other sampled institutions	7,921,668	313,831	169,170	138,728

-- = not available.

[1] Only the top 100 institutions that reported the largest amount of R&D expenditures received as a subrecipient are shown in this table.

NOTE: Because of rounding, detail may not add to totals. Also, detail may not add to totals because some respondents reporting Federal R&D funds received as a subrecipient did not break out these funds by type of pass-through entity (educational or other).

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

SECTION B. DETAILED STATISTICAL TABLES

Note

To obtain accurate historical data, use only the latest detailed statistical tables for FY 2002 and not data published earlier. Institutions revise prior-year data when important changes occur in reporting practices and program classifications, and only the latest tables incorporate such changes.

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TABLE B-1. R&D expenditures at universities and colleges, by source of funds: fiscal years 1953--2002

(Dollars in millions)

Fiscal year	Total	Source of funds				
		Federal Government	State and local government	Industry	Institutional funds	All other sources
1953	255	138	37	19	35	26
1954	290	160	42	22	38	28
1955	312	169	47	25	41	30
1956	372	213	53	29	43	34
1957	410	229	60	34	49	38
1958	456	254	68	39	53	42
1959	526	306	76	39	58	47
1960	646	405	85	40	64	52
1961	763	500	95	40	70	58
1962	904	613	106	40	79	66
1963	1,081	760	118	41	89	73
1964	1,275	917	132	40	103	83
1965	1,474	1,073	143	41	124	93
1966	1,715	1,261	156	42	148	108
1967	1,921	1,409	164	48	181	119
1968	2,149	1,572	172	55	218	132
1969	2,225	1,600	197	60	223	145
1970	2,335	1,647	219	61	243	165
1971	2,500	1,724	255	70	274	177
1972	2,630	1,795	269	74	305	187
1973	2,884	1,985	295	84	318	202
1974	3,022	2,032	308	95	368	219
1975	3,409	2,288	332	113	417	259
1976	3,729	2,512	364	123	446	285
1977	4,067	2,726	374	139	514	314
1978 [1]	4,625	3,059	414	170	623	359
1979	5,366	3,598	472	193	735	368
1980	6,063	4,098	491	236	835	403
1981	6,847	4,571	546	291	1,004	435
1982	7,324	4,768	616	337	1,111	491
1983	7,882	4,989	626	389	1,302	576
1984	8,620	5,431	690	475	1,411	613
1985	9,687	6,064	752	560	1,617	694
1986	10,928	6,712	915	700	1,869	732
1987	12,153	7,343	1,023	790	2,168	828
1988	13,463	8,193	1,106	872	2,356	935
1989	14,977	8,991	1,224	994	2,698	1,071
1990	16,286	9,638	1,324	1,127	3,006	1,191
1991	17,585	10,234	1,474	1,204	3,367	1,307
1992	18,818	11,093	1,491	1,279	3,547	1,409

See explanatory information and SOURCE at end of table.

TABLE B-1. R&D expenditures at universities and colleges, by source of funds: fiscal years 1953--2002

(Dollars in millions)

Fiscal year	Total	Source of funds				
		Federal Government	State and local government	Industry	Institutional funds	All other sources
1993	19,951	11,957	1,559	1,360	3,589	1,486
1994	21,027	12,649	1,554	1,422	3,827	1,574
1995	22,170	13,331	1,689	1,489	4,047	1,613
1996	23,045	13,840	1,811	1,605	4,170	1,619
1997	24,369	14,314	1,909	1,737	4,698	1,712
1998	25,854	15,150	1,944	1,888	5,002	1,870
1999	27,528	16,086	2,020	2,030	5,399	1,994
2000	30,063	17,518	2,198	2,153	5,940	2,254
2001	32,767	19,213	2,316	2,214	6,587	2,438
2002	36,333	21,834	2,501	2,188	7,109	2,701

[1] Fiscal year 1978 data are estimated based on data collected from doctorate-granting institutions only.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-2. R&D expenditures at universities and colleges, by character of work: fiscal years 1953--2002

(Dollars in millions)

Fiscal year	Total	Character of work			
		Basic research		Applied research and development	
		Amount	Percent of total	Amount	Percent of total
1953	255	110	43.1	145	56.9
1954	290	136	46.9	154	53.1
1955	312	159	51.0	153	49.0
1956	372	200	53.8	172	46.2
1957	410	240	58.5	170	41.5
1958	456	281	61.6	175	38.4
1959	526	343	65.2	183	34.8
1960	646	433	67.0	213	33.0
1961	763	536	70.2	227	29.8
1962	904	659	72.9	245	27.1
1963	1,081	814	75.3	267	24.7
1964	1,275	1,003	78.7	272	21.3
1965	1,474	1,138	77.2	336	22.8
1966	1,715	1,303	76.0	412	24.0
1967	1,921	1,457	75.8	464	24.2
1968	2,149	1,650	76.8	499	23.2
1969	2,225	1,711	76.9	514	23.1
1970	2,335	1,796	76.9	539	23.1
1971	2,500	1,914	76.6	586	23.4
1972	2,630	2,022	76.9	608	23.1
1973	2,884	2,053	71.2	831	28.8
1974	3,022	2,153	71.2	869	28.8
1975	3,409	2,410	70.7	999	29.3
1976	3,729	2,549	68.4	1,180	31.6
1977	4,067	2,800	68.8	1,267	31.2
1978 [1]	4,625	--	--	--	--
1979	5,366	3,619	67.4	1,747	32.6
1980	6,063	4,036	66.6	2,026	33.4
1981	6,847	4,594	67.1	2,253	32.9
1982	7,324	4,879	66.6	2,445	33.4
1983	7,882	5,303	67.3	2,579	32.7
1984	8,620	5,733	66.5	2,887	33.5
1985	9,687	6,556	67.7	3,131	32.3
1986	10,928	7,492	68.6	3,435	31.4
1987	12,153	8,393	69.1	3,760	30.9
1988	13,463	8,894	66.1	4,569	33.9
1989	14,977	9,792	65.4	5,185	34.6
1990	16,286	10,643	65.4	5,643	34.6
1991	17,585	11,606	66.0	5,979	34.0
1992	18,818	12,516	66.5	6,302	33.5

See explanatory information and SOURCE at end of table.

TABLE B-2. R&D expenditures at universities and colleges, by character of work: fiscal years 1953--2002

(Dollars in millions)

Fiscal year	Total	Character of work			
		Basic research		Applied research and development	
		Amount	Percent of total	Amount	Percent of total
1993	19,951	13,303	66.7	6,648	33.3
1994	21,027	13,986	66.5	7,041	33.5
1995	22,170	14,808	66.8	7,362	33.2
1996	23,045	15,478	67.2	7,567	32.8
1997	24,369	16,598	68.1	7,771	31.9
1998 [2]	25,854	18,789	72.7	7,065	27.3
1999	27,528	20,350	73.9	7,178	26.1
2000	30,063	22,243	74.0	7,820	26.0
2001	32,767	24,273	74.1	8,494	25.9
2002	36,333	26,959	74.2	9,374	25.8

[1] Separate data for basic research and applied research and development were not collected for fiscal year 1978.
[2] The character of work estimation procedure was revised for fiscal year 1998 and later years; hence, these data are not directly comparable with data for 1997 and earlier years.

-- = not available.

NOTES: R&D expenditures by character of work are based on estimates of basic research provided by universities and colleges. Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-2a. Federally financed R&D expenditures at universities and colleges, by character of work: fiscal years 1953--2002

(Dollars in millions)

Fiscal year	Total	Character of work			
		Basic research		Applied research and development	
		Amount	Percent of total	Amount	Percent of total
1953	138	--	--	--	--
1954	160	--	--	--	--
1955	169	--	--	--	--
1956	213	--	--	--	--
1957	229	--	--	--	--
1958	254	--	--	--	--
1959	306	--	--	--	--
1960	405	--	--	--	--
1961	500	--	--	--	--
1962	613	--	--	--	--
1963	760	--	--	--	--
1964	917	--	--	--	--
1965	1,073	--	--	--	--
1966	1,261	--	--	--	--
1967	1,409	--	--	--	--
1968	1,572	--	--	--	--
1969	1,600	--	--	--	--
1970	1,647	--	--	--	--
1971	1,724	--	--	--	--
1972	1,795	1,420	79.1	375	20.9
1973	1,985	1,454	73.2	531	26.8
1974	2,032	1,523	75.0	509	25.0
1975	2,288	1,695	74.1	593	25.9
1976	2,512	1,841	73.3	671	26.7
1977	2,726	2,007	73.6	719	26.4
1978 [1]	3,059	--	--	--	--
1979	3,598	2,577	71.6	1,022	28.4
1980	4,098	2,861	69.8	1,237	30.2
1981	4,571	3,260	71.3	1,311	28.7
1982	4,768	3,402	71.3	1,367	28.7
1983	4,989	3,547	71.1	1,442	28.9
1984	5,431	3,830	70.5	1,601	29.5
1985	6,064	4,343	71.6	1,722	28.4
1986	6,712	4,868	72.5	1,844	27.5
1987	7,343	5,375	73.2	1,968	26.8
1988	8,193	5,678	69.3	2,515	30.7
1989	8,991	6,195	68.9	2,796	31.1
1990	9,638	6,648	69.0	2,990	31.0
1991	10,234	7,127	69.6	3,107	30.4
1992	11,093	7,718	69.6	3,375	30.4

See explanatory information and SOURCE at end of table.

TABLE B-2a. Federally financed R&D expenditures at universities and colleges, by character of work: fiscal years 1953--2002

(Dollars in millions)

Fiscal year	Total	Character of work			
		Basic research		Applied research and development	
		Amount	Percent of total	Amount	Percent of total
1993	11,957	8,398	70.2	3,559	29.8
1994	12,649	8,877	70.2	3,772	29.8
1995	13,331	9,397	70.5	3,934	29.5
1996	13,840	9,866	71.3	3,973	28.7
1997	14,314	10,313	72.1	4,000	27.9
1998 [2]	15,150	11,607	76.6	3,543	23.4
1999	16,086	12,641	78.6	3,445	21.4
2000	17,518	13,749	78.5	3,769	21.5
2001	19,213	14,985	78.0	4,228	22.0
2002	21,834	16,945	77.6	4,889	22.4

[1] Separate data for basic research and applied research and development were not collected for fiscal year 1978.
[2] The character of work estimation procedure was revised for fiscal year 1998 and later years; hence, these data are not directly comparable with data for 1997 and earlier years.

-- = not available.

NOTES: R&D expenditures by character of work are based on estimates of basic research provided by universities and colleges. Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-3. R&D expenditures at universities and colleges, by source of funds and science and engineering field: fiscal years 1995--2002

(Dollars in thousands)

Source and field	1995	1996	1997	1998	1999	2000	2001	2002
Total	22,169,797	23,044,839	24,368,723	25,853,712	27,528,325	30,062,741	32,767,087	36,332,641
	Source of funds							
Federal Government	13,331,310	13,839,651	14,313,608	15,149,731	16,086,023	17,517,599	19,212,719	21,833,953
State and local government	1,689,274	1,811,055	1,909,208	1,943,847	2,019,915	2,198,352	2,315,761	2,500,649
Industry	1,488,973	1,605,338	1,736,749	1,888,254	2,029,743	2,152,871	2,213,929	2,188,111
Institutional funds	4,047,133	4,170,194	4,697,557	5,002,143	5,398,717	5,940,091	6,586,608	7,108,773
All other sources	1,613,107	1,618,601	1,711,601	1,869,737	1,993,927	2,253,828	2,438,070	2,701,155
	Field							
Engineering	3,515,329	3,707,370	3,839,091	4,069,201	4,260,962	4,553,577	5,006,732	5,504,227
Aeronautical and astronautical	241,113	233,008	247,054	249,794	260,477	256,336	338,453	341,970
Bioengineering/biomedical	--	--	76,791	101,957	136,561	173,707	212,730	285,476
Chemical	297,062	317,189	316,672	327,080	349,026	375,723	413,953	430,076
Civil	430,789	454,641	471,818	494,843	529,269	600,892	667,201	720,965
Electrical	818,614	887,724	941,932	1,042,303	1,016,660	1,117,502	1,161,794	1,302,813
Mechanical	520,836	519,276	517,735	567,878	625,353	632,383	686,561	779,047
Metallurgical and materials	329,868	349,407	388,828	391,397	384,010	399,296	452,692	467,278
Other, nec	877,047	946,125	878,261	893,949	959,606	997,738	1,073,348	1,176,602
All sciences	18,654,468	19,337,469	20,529,632	21,784,511	23,267,363	25,509,164	27,760,355	30,828,414
Physical sciences	2,255,939	2,257,754	2,370,954	2,482,895	2,604,923	2,711,061	2,804,939	3,008,466
Astronomy	303,632	275,833	287,435	302,457	384,295	385,315	377,936	402,057
Chemistry	771,414	801,794	820,715	876,208	919,018	961,168	1,009,187	1,128,600
Physics	989,432	987,515	1,058,544	1,078,495	1,149,109	1,207,024	1,239,675	1,282,092
Other, nec	191,461	192,612	204,260	225,735	152,501	157,554	178,141	195,717
Environmental sciences	1,433,899	1,489,033	1,532,798	1,624,395	1,691,658	1,764,409	1,829,939	2,022,423
Atmospheric	208,088	224,465	245,509	269,180	287,859	287,358	300,465	340,778
Earth sciences	457,089	446,231	449,704	513,543	545,435	562,892	555,098	645,021
Oceanography	473,382	533,457	536,706	545,680	604,173	632,708	674,657	719,406
Other, nec	295,340	284,880	300,879	295,992	254,191	281,451	299,719	317,218
Mathematical sciences	278,670	288,272	289,491	310,385	313,317	340,956	358,710	386,584
Computer sciences	682,241	690,055	709,521	746,645	861,057	876,001	954,478	1,125,931
Life sciences	12,187,708	12,715,578	13,590,617	14,595,949	15,629,032	17,467,534	19,212,803	21,404,172
Agricultural sciences	1,814,348	1,910,215	1,966,202	1,995,736	2,035,689	2,177,088	2,326,059	2,433,891
Biological sciences	3,835,542	3,911,517	4,182,758	4,583,621	5,038,373	5,617,977	5,944,043	6,577,585
Medical sciences	6,070,047	6,390,804	6,907,861	7,471,743	8,003,039	8,986,419	10,189,478	11,504,705
Other, nec	467,771	503,042	533,796	544,849	551,931	686,050	753,223	887,991
Psychology	370,526	381,546	396,180	444,304	464,260	516,337	582,613	670,622
Social sciences	1,018,924	1,096,558	1,125,278	1,131,262	1,251,709	1,298,305	1,440,335	1,582,888
Economics	250,355	271,459	260,757	261,098	266,421	255,062	271,653	284,056
Political science	173,016	179,772	175,472	175,529	200,294	229,838	253,129	270,779
Sociology	215,138	230,677	257,322	252,797	271,348	300,788	327,932	379,302
Other, nec	380,415	414,650	431,727	441,838	513,646	512,617	587,621	648,751
Other sciences, nec	426,561	418,673	514,793	448,676	451,407	534,561	576,538	627,328

-- = not available.
nec = not elsewhere classified.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-4. Federally financed R&D expenditures at universities and colleges, by science and engineering field: fiscal years 1995--2002

(Dollars in thousands)

Field	1995	1996	1997	1998	1999	2000	2001	2002
Total	13,331,310	13,839,651	14,313,608	15,149,731	16,086,023	17,517,599	19,212,719	21,833,953
Engineering	2,101,744	2,232,319	2,255,999	2,353,873	2,440,637	2,573,486	2,845,685	3,217,302
Aeronautical and astronautical	183,695	171,227	183,350	170,794	183,052	180,924	254,224	245,591
Bioengineering/biomedical	--	--	47,517	56,635	72,159	90,736	120,815	169,281
Chemical	161,117	173,770	165,856	169,276	178,870	195,082	214,893	228,543
Civil	185,896	197,741	200,357	197,086	216,317	236,401	270,707	307,939
Electrical	543,647	599,810	624,262	692,549	649,815	699,803	725,808	817,403
Mechanical	339,627	334,913	322,462	350,741	387,941	382,734	416,323	507,328
Metallurgical and materials	175,508	190,455	222,456	221,691	217,305	225,918	240,780	262,188
Other, nec	512,254	564,403	489,739	495,101	535,178	561,888	602,135	679,029
All sciences	11,229,566	11,607,332	12,057,609	12,795,858	13,645,386	14,944,113	16,367,034	18,616,651
Physical sciences	1,637,448	1,630,032	1,683,037	1,761,622	1,861,046	1,912,659	1,973,662	2,124,143
Astronomy	206,964	182,354	182,988	187,993	272,468	276,493	259,732	277,380
Chemistry	533,165	553,613	551,700	586,982	616,442	630,049	661,223	737,272
Physics	761,779	757,293	803,283	817,951	867,445	900,671	926,721	970,813
Other, nec	135,540	136,772	145,066	168,696	104,691	105,446	125,986	138,678
Environmental sciences	962,008	1,006,568	1,012,442	1,076,477	1,101,656	1,132,546	1,184,566	1,293,610
Atmospheric	163,653	175,954	186,622	209,549	222,376	221,834	232,150	249,567
Earth sciences	273,899	268,005	269,073	312,143	321,182	331,598	329,146	374,089
Oceanography	331,516	371,406	355,498	362,204	405,278	422,144	448,065	485,727
Other, nec	192,940	191,203	201,249	192,581	152,820	156,970	175,205	184,227
Mathematical sciences	204,772	208,042	202,052	214,133	209,229	228,647	241,653	266,788
Computer sciences	483,410	501,578	506,348	513,479	582,811	582,699	643,583	769,761
Life sciences	7,113,540	7,405,504	7,763,672	8,333,295	8,953,776	10,063,590	11,195,048	12,852,020
Agricultural sciences	531,505	559,673	548,427	533,532	545,033	577,929	617,625	685,686
Biological sciences	2,490,013	2,530,066	2,684,706	2,938,057	3,221,331	3,653,857	3,871,355	4,406,305
Medical sciences	3,826,912	4,023,873	4,226,915	4,559,278	4,865,993	5,441,833	6,260,185	7,230,513
Other, nec	265,110	291,892	303,624	302,428	321,419	389,971	445,883	529,516
Psychology	248,804	258,418	271,391	298,661	309,274	350,232	398,312	474,374
Social sciences	387,800	422,827	408,693	425,398	471,881	489,970	545,973	616,163
Economics	80,029	90,659	89,803	92,250	90,114	89,002	89,938	101,378
Political science	59,649	62,248	51,768	53,115	54,052	62,718	71,983	75,761
Sociology	104,420	118,963	120,578	118,950	121,951	136,678	148,343	180,752
Other, nec	143,702	150,957	146,544	161,083	205,764	201,572	235,709	258,272
Other sciences, nec	191,784	174,363	209,974	172,793	155,713	183,770	184,237	219,792

-- = not available.
nec = not elsewhere classified.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-5. Non-Federal R&D expenditures at universities and colleges, by source of funds and science and engineering field: fiscal years 1995--2002

(Dollars in thousands)

Source and field	1995	1996	1997	1998	1999	2000	2001	2002
Total	8,838,487	9,205,188	10,055,115	10,703,981	11,442,302	12,545,142	13,554,368	14,498,688
	Source of funds							
State and local government	1,689,274	1,811,055	1,909,208	1,943,847	2,019,915	2,198,352	2,315,761	2,500,649
Industry	1,488,973	1,605,338	1,736,749	1,888,254	2,029,743	2,152,871	2,213,929	2,188,111
Institutional funds	4,047,133	4,170,194	4,697,557	5,002,143	5,398,717	5,940,091	6,586,608	7,108,773
All other sources	1,613,107	1,618,601	1,711,601	1,869,737	1,993,927	2,253,828	2,438,070	2,701,155
	Field							
Engineering	1,413,585	1,475,051	1,583,092	1,715,328	1,820,325	1,980,091	2,161,047	2,286,925
Aeronautical and astronautical	57,418	61,781	63,704	79,000	77,425	75,412	84,229	96,379
Bioengineering/biomedical	--	--	29,274	45,322	64,402	82,971	91,915	116,195
Chemical	135,945	143,419	150,816	157,804	170,156	180,641	199,060	201,533
Civil	244,893	256,900	271,461	297,757	312,952	364,491	396,494	413,026
Electrical	274,967	287,914	317,670	349,754	366,845	417,699	435,986	485,410
Mechanical	181,209	184,363	195,273	217,137	237,412	249,649	270,238	271,719
Metallurgical and materials	154,360	158,952	166,372	169,706	166,705	173,378	211,912	205,090
Other, nec	364,793	381,722	388,522	398,848	424,428	435,850	471,213	497,573
All sciences	7,424,902	7,730,137	8,472,023	8,988,653	9,621,977	10,565,051	11,393,321	12,211,763
Physical sciences	618,491	627,722	687,917	721,273	743,877	798,402	831,277	884,323
Astronomy	96,668	93,479	104,447	114,464	111,827	108,822	118,204	124,677
Chemistry	238,249	248,181	269,015	289,226	302,576	331,119	347,964	391,328
Physics	227,653	230,222	255,261	260,544	281,664	306,353	312,954	311,279
Other, nec	55,921	55,840	59,194	57,039	47,810	52,108	52,155	57,039
Environmental sciences	471,891	482,465	520,356	547,918	590,002	631,863	645,373	728,813
Atmospheric	44,435	48,511	58,887	59,631	65,483	65,524	68,315	91,211
Earth sciences	183,190	178,226	180,631	201,400	224,253	231,294	225,952	270,932
Oceanography	141,866	162,051	181,208	183,476	198,895	210,564	226,592	233,679
Other, nec	102,400	93,677	99,630	103,411	101,371	124,481	124,514	132,991
Mathematical sciences	73,898	80,230	87,439	96,252	104,088	112,309	117,057	119,796
Computer sciences	198,831	188,477	203,173	233,166	278,246	293,302	310,895	356,170
Life sciences	5,074,168	5,310,074	5,826,945	6,262,654	6,675,256	7,403,944	8,017,755	8,552,152
Agricultural sciences	1,282,843	1,350,542	1,417,775	1,462,204	1,490,656	1,599,159	1,708,434	1,748,205
Biological sciences	1,345,529	1,381,451	1,498,052	1,645,564	1,817,042	1,964,120	2,072,688	2,171,280
Medical sciences	2,243,135	2,366,931	2,680,946	2,912,465	3,137,046	3,544,586	3,929,293	4,274,192
Other, nec	202,661	211,150	230,172	242,421	230,512	296,079	307,340	358,475
Psychology	121,722	123,128	124,789	145,643	154,986	166,105	184,301	196,248
Social sciences	631,124	673,731	716,585	705,864	779,828	808,335	894,362	966,725
Economics	170,326	180,800	170,954	168,848	176,307	166,060	181,715	182,678
Political science	113,367	117,524	123,704	122,414	146,242	167,120	181,146	195,018
Sociology	110,718	111,714	136,744	133,847	149,397	164,110	179,589	198,550
Other, nec	236,713	263,693	285,183	280,755	307,882	311,045	351,912	390,479
Other sciences, nec	234,777	244,310	304,819	275,883	295,694	350,791	392,301	407,536

-- = not available.
nec = not elsewhere classified.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-6. R&D expenditures at doctorate-granting institutions, by source of funds and science and engineering field: fiscal years 1995--2002

(Dollars in thousands)

Source and field	1995	1996	1997	1998	1999	2000	2001	2002
Total	21,813,974	22,668,439	23,953,725	25,405,667	27,084,152	29,613,610	32,256,089	35,713,964
	Source of funds							
Federal Government	13,117,586	13,612,776	14,059,817	14,878,982	15,827,630	17,241,158	18,900,336	21,462,506
State and local government	1,647,131	1,769,032	1,863,310	1,893,168	1,949,020	2,155,676	2,265,849	2,430,385
Industry	1,456,705	1,571,436	1,702,094	1,855,824	1,996,912	2,117,153	2,177,521	2,150,625
Institutional funds	3,999,814	4,120,101	4,642,917	4,949,214	5,353,032	5,888,941	6,529,015	7,018,787
All other sources	1,592,738	1,595,094	1,685,587	1,828,479	1,957,558	2,210,682	2,383,368	2,651,661
	Field							
Engineering	3,457,041	3,645,470	3,771,399	3,997,987	4,191,195	4,481,576	4,917,885	5,410,293
Aeronautical and astronautical	235,389	228,167	242,306	245,577	250,487	244,630	315,381	313,787
Bioengineering/biomedical	--	--	76,463	101,655	134,692	171,306	210,065	284,469
Chemical	294,886	314,887	313,169	323,873	347,226	373,436	410,468	427,106
Civil	417,264	441,669	458,336	481,925	520,645	592,426	658,823	710,949
Electrical	807,128	872,881	928,811	1,027,461	1,004,350	1,104,720	1,148,944	1,291,752
Mechanical	511,100	508,226	499,720	545,883	611,893	618,989	670,939	765,380
Metallurgical and materials	328,258	347,647	386,901	389,291	381,746	397,353	451,093	465,557
Other, nec	863,016	931,993	865,693	882,322	940,156	978,716	1,052,172	1,151,293
All sciences	18,356,933	19,022,969	20,182,326	21,407,680	22,892,957	25,132,034	27,338,204	30,303,671
Physical sciences	2,186,747	2,181,966	2,289,984	2,392,908	2,527,377	2,634,637	2,725,989	2,915,821
Astronomy	301,300	273,888	285,382	299,579	381,264	382,198	374,181	396,897
Chemistry	736,603	762,959	779,622	830,390	874,225	922,935	971,045	1,083,068
Physics	959,645	954,627	1,022,987	1,039,428	1,122,048	1,173,851	1,206,689	1,244,732
Other, nec	189,199	190,492	201,993	223,511	149,840	155,653	174,074	191,124
Environmental sciences	1,396,488	1,449,406	1,493,934	1,583,978	1,644,812	1,719,254	1,781,035	1,960,206
Atmospheric	204,724	221,271	242,637	265,388	284,485	284,484	296,374	338,234
Earth sciences	442,996	429,647	431,860	493,091	524,021	542,821	530,813	615,391
Oceanography	461,802	523,000	526,120	534,108	587,633	617,611	662,205	700,978
Other, nec	286,966	275,488	293,317	291,391	248,673	274,338	291,643	305,603
Mathematical sciences	267,455	276,643	277,688	299,626	301,517	327,394	341,444	365,193
Computer sciences	671,041	675,097	691,727	727,530	831,971	848,815	923,525	1,097,755
Life sciences	12,078,558	12,600,309	13,454,100	14,441,745	15,486,024	17,324,845	19,051,630	21,198,996
Agricultural sciences	1,774,205	1,870,293	1,914,186	1,934,937	1,976,808	2,119,786	2,261,436	2,349,967
Biological sciences	3,777,128	3,848,510	4,113,680	4,510,180	4,974,830	5,551,631	5,874,050	6,491,708
Medical sciences	6,063,487	6,382,419	6,895,796	7,456,319	7,989,457	8,975,069	10,173,302	11,485,100
Other, nec	463,738	499,087	530,438	540,309	544,929	678,359	742,842	872,221
Psychology	352,252	363,806	377,712	426,159	450,186	500,853	563,968	645,613
Social sciences	992,477	1,069,224	1,093,512	1,100,314	1,219,824	1,267,267	1,404,446	1,539,303
Economics	244,722	267,504	256,523	257,952	262,230	250,689	265,322	278,273
Political science	170,467	176,908	172,558	172,644	197,250	226,906	248,705	264,838
Sociology	207,645	222,406	249,528	243,959	260,287	289,583	318,106	366,762
Other, nec	369,643	402,406	414,903	425,759	500,057	500,089	572,313	629,430
Other sciences, nec	411,915	406,518	503,669	435,420	431,246	508,969	546,167	580,784

-- = not available.
nec = not elsewhere classified.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-7. Federally financed R&D expenditures at doctorate-granting institutions, by science and engineering field: fiscal years 1995--2002

(Dollars in thousands)

Field	1995	1996	1997	1998	1999	2000	2001	2002
Total	13,117,586	13,612,776	14,059,817	14,878,982	15,827,630	17,241,158	18,900,336	21,462,506
Engineering	2,071,611	2,197,686	2,217,245	2,313,222	2,402,345	2,533,864	2,798,139	3,171,957
Aeronautical and astronautical	178,293	166,833	179,153	167,026	173,393	169,498	231,942	229,951
Bioengineering/biomedical	--	--	47,189	56,369	71,797	89,959	120,071	168,940
Chemical	159,739	172,196	163,252	167,106	177,917	193,854	213,597	226,520
Civil	180,906	191,847	194,071	190,592	213,564	233,741	267,981	305,031
Electrical	535,675	589,215	615,286	683,459	640,887	690,391	720,124	811,006
Mechanical	335,256	329,212	310,876	337,258	381,053	376,428	411,152	500,877
Metallurgical and materials	174,545	189,379	221,276	220,308	215,558	224,328	239,534	260,885
Other, nec	507,197	559,004	486,142	491,104	528,176	555,665	593,738	668,747
All sciences	11,045,975	11,415,090	11,842,572	12,565,760	13,425,285	14,707,294	16,102,197	18,290,549
Physical sciences	1,591,896	1,581,693	1,632,391	1,702,459	1,808,586	1,862,242	1,920,340	2,061,414
Astronomy	205,277	181,090	181,540	185,855	270,335	274,308	256,972	273,329
Chemistry	509,701	527,761	524,515	554,592	585,652	605,181	636,509	707,746
Physics	742,696	737,160	782,323	794,628	849,277	878,041	903,160	944,491
Other, nec	134,222	135,682	144,013	167,384	103,322	104,712	123,699	135,848
Environmental sciences	942,624	986,372	992,386	1,056,276	1,079,863	1,109,427	1,158,586	1,261,439
Atmospheric	161,008	173,357	184,400	206,331	219,637	219,422	228,717	247,588
Earth sciences	266,631	259,560	259,550	302,285	310,771	321,299	317,424	358,605
Oceanography	326,038	366,619	350,689	357,081	398,740	414,983	441,433	475,774
Other, nec	188,947	186,836	197,747	190,579	150,715	153,723	171,012	179,472
Mathematical sciences	197,637	200,821	195,116	207,920	201,823	220,178	231,388	254,249
Computer sciences	477,025	492,258	493,469	501,276	564,145	562,950	622,008	751,741
Life sciences	7,040,161	7,327,640	7,669,446	8,232,464	8,865,823	9,964,593	11,083,753	12,705,707
Agricultural sciences	502,108	530,305	509,279	493,873	511,989	538,856	575,584	628,198
Biological sciences	2,453,228	2,490,229	2,641,089	2,890,275	3,179,189	3,607,041	3,820,529	4,341,245
Medical sciences	3,822,662	4,018,136	4,217,840	4,549,287	4,858,014	5,434,877	6,249,559	7,218,105
Other, nec	262,163	288,970	301,238	299,029	316,631	383,819	438,081	518,159
Psychology	235,931	246,929	260,248	288,679	300,012	338,254	383,884	456,158
Social sciences	376,695	411,939	395,660	412,405	459,274	477,313	531,605	600,810
Economics	76,472	88,635	87,661	90,454	88,217	86,927	87,311	99,023
Political science	59,199	61,604	51,155	52,152	53,358	61,892	70,432	74,419
Sociology	100,839	114,780	116,853	114,549	117,807	132,303	144,243	175,997
Other, nec	140,185	146,920	139,991	155,250	199,892	196,191	229,619	251,371
Other sciences, nec	184,006	167,438	203,856	164,281	145,759	172,337	170,633	199,031

-- = not available.
nec = not elsewhere classified.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-8. Non-Federal R&D expenditures at doctorate-granting institutions, by source of funds and science and engineering field: fiscal years 1995--2002

(Dollars in thousands)

Source and field	1995	1996	1997	1998	1999	2000	2001	2002
Total	8,696,388	9,055,663	9,893,908	10,526,685	11,256,522	12,372,452	13,355,753	14,251,458
	Source of funds							
State and local government	1,647,131	1,769,032	1,863,310	1,893,168	1,949,020	2,155,676	2,265,849	2,430,385
Industry	1,456,705	1,571,436	1,702,094	1,855,824	1,996,912	2,117,153	2,177,521	2,150,625
Institutional funds	3,999,814	4,120,101	4,642,917	4,949,214	5,353,032	5,888,941	6,529,015	7,018,787
All other sources	1,592,738	1,595,094	1,685,587	1,828,479	1,957,558	2,210,682	2,383,368	2,651,661
	Field							
Engineering	1,385,430	1,447,784	1,554,154	1,684,765	1,788,850	1,947,712	2,119,746	2,238,336
Aeronautical and astronautical	57,096	61,334	63,153	78,551	77,094	75,132	83,439	83,836
Bioengineering/biomedical	--	--	29,274	45,286	62,895	81,347	89,994	115,529
Chemical	135,147	142,691	149,917	156,767	169,309	179,582	196,871	200,586
Civil	236,358	249,822	264,265	291,333	307,081	358,685	390,842	405,918
Electrical	271,453	283,666	313,525	344,002	363,463	414,329	428,820	480,746
Mechanical	175,844	179,014	188,844	208,625	230,840	242,561	259,787	264,503
Metallurgical and materials	153,713	158,268	165,625	168,983	166,188	173,025	211,559	204,672
Other, nec	355,819	372,989	379,551	391,218	411,980	423,051	458,434	482,546
All sciences	7,310,958	7,607,879	8,339,754	8,841,920	9,467,672	10,424,740	11,236,007	12,013,122
Physical sciences	594,851	600,273	657,593	690,449	718,791	772,395	805,649	854,407
Astronomy	96,023	92,798	103,842	113,724	110,929	107,890	117,209	123,568
Chemistry	226,902	235,198	255,107	275,798	288,573	317,754	334,536	375,322
Physics	216,949	217,467	240,664	244,800	272,771	295,810	303,529	300,241
Other, nec	54,977	54,810	57,980	56,127	46,518	50,941	50,375	55,276
Environmental sciences	453,864	463,034	501,548	527,702	564,949	609,827	622,449	698,767
Atmospheric	43,716	47,914	58,237	59,057	64,848	65,062	67,657	90,646
Earth sciences	176,365	170,087	172,310	190,806	213,250	221,522	213,389	256,786
Oceanography	135,764	156,381	175,431	177,027	188,893	202,628	220,772	225,204
Other, nec	98,019	88,652	95,570	100,812	97,958	120,615	120,631	126,131
Mathematical sciences	69,818	75,822	82,572	91,706	99,694	107,216	110,056	110,944
Computer sciences	194,016	182,839	198,258	226,254	267,826	285,865	301,517	346,014
Life sciences	5,038,397	5,272,669	5,784,654	6,209,281	6,620,201	7,360,252	7,967,877	8,493,289
Agricultural sciences	1,272,097	1,339,988	1,404,907	1,441,064	1,464,819	1,580,930	1,685,852	1,721,769
Biological sciences	1,323,900	1,358,281	1,472,591	1,619,905	1,795,641	1,944,590	2,053,521	2,150,463
Medical sciences	2,240,825	2,364,283	2,677,956	2,907,032	3,131,443	3,540,192	3,923,743	4,266,995
Other, nec	201,575	210,117	229,200	241,280	228,298	294,540	304,761	354,062
Psychology	116,321	116,877	117,464	137,480	150,174	162,599	180,084	189,455
Social sciences	615,782	657,285	697,852	687,909	760,550	789,954	872,841	938,493
Economics	168,250	178,869	168,862	167,498	174,013	163,762	178,011	179,250
Political science	111,268	115,304	121,403	120,492	143,892	165,014	178,273	190,419
Sociology	106,806	107,626	132,675	129,410	142,480	157,280	173,863	190,765
Other, nec	229,458	255,486	274,912	270,509	300,165	303,898	342,694	378,059
Other sciences, nec	227,909	239,080	299,813	271,139	285,487	336,632	375,534	381,753

-- = not available.
nec = not elsewhere classified.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-9. R&D expenditures at public universities and colleges, by source of funds and science and engineering field: fiscal years 1995--2002

(Dollars in thousands)

Source and field	1995	1996	1997	1998	1999	2000	2001	2002
Total	14,950,767	15,586,846	16,423,787	17,477,837	18,658,573	20,507,906	22,378,955	24,830,706
	Source of funds							
Federal Government	8,100,715	8,465,855	8,570,426	9,071,762	9,701,242	10,636,386	11,709,181	13,367,288
State and local government	1,512,297	1,649,854	1,741,687	1,773,165	1,842,995	2,003,707	2,080,164	2,249,577
Industry	1,003,166	1,076,402	1,175,759	1,279,643	1,336,750	1,436,838	1,472,639	1,461,887
Institutional funds	3,386,732	3,418,267	3,887,994	4,214,995	4,562,726	5,004,902	5,575,172	5,994,753
All other sources	947,857	976,468	1,047,921	1,138,272	1,214,860	1,426,073	1,541,799	1,757,201
	Field							
Engineering	2,441,381	2,588,219	2,686,938	2,866,557	3,047,156	3,293,681	3,627,357	3,961,209
Aeronautical and astronautical	143,414	138,742	154,599	155,112	188,634	179,110	244,227	239,144
Bioengineering/biomedical	--	--	52,227	62,102	79,067	106,507	134,924	188,571
Chemical	205,707	226,818	237,034	245,193	254,752	272,616	299,707	316,733
Civil	361,520	381,681	399,490	425,828	447,661	509,503	565,970	608,767
Electrical	539,551	584,823	626,078	714,152	712,885	784,825	814,001	919,139
Mechanical	346,350	349,516	332,315	368,121	414,864	419,124	453,098	520,527
Metallurgical and materials	253,116	259,650	289,409	281,720	277,709	295,949	345,792	351,249
Other, nec	591,723	646,989	595,786	614,329	671,584	726,047	769,638	817,079
All sciences	12,509,386	12,998,627	13,736,849	14,611,280	15,611,417	17,214,225	18,751,598	20,869,497
Physical sciences	1,465,980	1,445,573	1,501,702	1,586,220	1,676,874	1,803,311	1,875,802	2,025,683
Astronomy	213,617	186,886	187,883	206,489	230,499	244,043	243,920	267,366
Chemistry	521,683	541,621	557,719	587,930	623,243	673,222	717,759	824,131
Physics	595,531	592,151	628,276	647,426	755,085	809,348	831,101	846,673
Other, nec	135,149	124,915	127,824	144,375	68,047	76,698	83,022	87,513
Environmental sciences	1,135,706	1,193,776	1,225,620	1,284,009	1,357,833	1,423,506	1,489,430	1,655,010
Atmospheric	175,934	192,863	213,054	228,106	236,304	233,638	245,734	286,033
Earth sciences	343,984	331,527	334,796	380,881	421,657	447,624	443,785	523,594
Oceanography	423,223	483,769	487,361	490,213	512,844	543,166	583,178	611,009
Other, nec	192,565	185,617	190,409	184,809	187,028	199,078	216,733	234,374
Mathematical sciences	168,369	174,349	178,214	196,137	195,130	214,740	233,549	257,922
Computer sciences	340,448	336,211	349,682	398,657	488,767	526,205	571,078	666,558
Life sciences	8,069,868	8,432,072	8,983,327	9,638,148	10,267,955	11,484,204	12,612,219	14,075,618
Agricultural sciences	1,759,184	1,858,203	1,905,748	1,930,706	1,979,307	2,115,751	2,252,328	2,355,956
Biological sciences	2,410,852	2,458,921	2,621,494	2,888,688	3,200,984	3,586,542	3,707,240	4,156,695
Medical sciences	3,638,996	3,815,982	4,138,098	4,494,943	4,767,245	5,351,854	6,154,035	6,959,588
Other, nec	260,836	298,966	317,987	323,811	320,419	430,057	498,616	603,379
Psychology	268,819	280,641	298,618	333,123	344,496	381,477	433,854	496,651
Social sciences	763,930	840,209	854,172	873,240	971,748	999,822	1,127,962	1,247,427
Economics	207,414	225,592	206,754	208,011	217,311	205,771	229,030	239,918
Political science	108,154	113,294	110,874	109,450	122,290	139,113	151,698	151,577
Sociology	165,975	176,042	196,988	194,764	202,817	223,578	249,308	300,288
Other, nec	282,387	325,281	339,556	361,015	429,330	431,360	497,926	555,644
Other sciences, nec	296,266	295,796	345,514	301,746	308,614	380,960	407,704	444,628

-- = not available.
nec = not elsewhere classified.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-10. Federally financed R&D expenditures at public universities and colleges, by science and engineering field: fiscal years 1995--2002

(Dollars in thousands)

Field	1995	1996	1997	1998	1999	2000	2001	2002
Total	8,100,715	8,465,855	8,570,426	9,071,762	9,701,242	10,636,386	11,709,181	13,367,288
Engineering	1,276,953	1,384,462	1,372,395	1,441,314	1,515,929	1,628,124	1,825,055	2,040,965
Aeronautical and astronautical	98,296	91,748	100,864	96,801	121,299	115,577	175,385	157,551
Bioengineering/biomedical	--	--	29,111	26,487	29,489	41,284	63,743	98,933
Chemical	100,718	115,494	113,651	116,970	118,524	129,521	141,532	150,402
Civil	141,497	151,062	155,174	156,426	167,677	180,322	210,727	236,016
Electrical	322,072	362,289	377,082	433,080	414,769	451,198	462,492	522,744
Mechanical	199,227	205,368	178,956	192,166	222,757	217,836	240,066	306,118
Metallurgical and materials	123,476	126,256	148,402	146,223	140,077	151,318	168,962	179,060
Other, nec	291,667	332,245	269,155	273,161	301,337	341,068	362,148	390,141
All sciences	6,823,762	7,081,393	7,198,031	7,630,448	8,185,313	9,008,262	9,884,126	11,326,323
Physical sciences	966,571	946,339	946,009	1,003,309	1,054,797	1,135,887	1,183,548	1,294,580
Astronomy	133,463	108,322	98,445	110,048	128,632	144,433	138,548	155,646
Chemistry	341,232	351,421	349,933	361,584	382,084	410,251	440,419	508,469
Physics	406,582	404,613	416,618	429,547	511,651	546,190	559,638	586,672
Other, nec	85,294	81,983	81,013	102,130	32,430	35,013	44,943	43,793
Environmental sciences	717,901	764,391	753,513	788,094	823,698	851,418	904,637	992,860
Atmospheric	134,031	147,634	156,847	172,048	175,540	173,790	184,429	201,927
Earth sciences	183,312	174,713	172,399	200,834	221,706	242,138	243,334	279,632
Oceanography	289,030	330,735	313,399	313,823	324,528	340,950	364,765	390,069
Other, nec	111,528	111,309	110,868	101,389	101,924	94,540	112,109	121,232
Mathematical sciences	106,906	107,783	107,071	115,756	109,138	122,531	134,885	157,098
Computer sciences	207,688	209,590	209,821	230,433	284,996	305,360	334,752	396,428
Life sciences	4,240,364	4,441,345	4,562,827	4,873,339	5,237,642	5,856,707	6,497,547	7,529,860
Agricultural sciences	511,712	542,587	521,933	508,316	527,783	559,485	595,034	662,251
Biological sciences	1,423,799	1,460,926	1,531,247	1,672,810	1,854,267	2,135,113	2,197,354	2,548,778
Medical sciences	2,175,800	2,279,699	2,345,951	2,546,439	2,699,819	2,957,029	3,450,151	4,006,191
Other, nec	129,053	158,133	163,696	145,774	155,773	205,080	255,008	312,640
Psychology	176,856	188,094	198,604	215,931	219,534	248,018	282,452	337,878
Social sciences	273,853	307,266	294,466	310,723	355,303	365,213	412,043	471,912
Economics	65,377	72,664	64,862	65,795	68,360	68,388	71,491	83,215
Political science	29,588	31,905	27,415	28,447	29,585	31,018	36,835	35,006
Sociology	75,857	86,299	87,852	85,646	84,462	97,082	110,163	138,460
Other, nec	103,031	116,398	114,337	130,835	172,896	168,725	193,554	215,231
Other sciences, nec	133,623	116,585	125,720	92,863	100,205	123,128	134,262	145,707

-- = not available.
nec = not elsewhere classified.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-11. Non-Federal R&D expenditures at public universities and colleges, by source of funds and science and engineering field: fiscal years 1995--2002

(Dollars in thousands)

Source and field	1995	1996	1997	1998	1999	2000	2001	2002
Total	6,850,052	7,120,991	7,853,361	8,406,075	8,957,331	9,871,520	10,669,774	11,463,418
	Source of funds							
State and local government	1,512,297	1,649,854	1,741,687	1,773,165	1,842,995	2,003,707	2,080,164	2,249,577
Industry	1,003,166	1,076,402	1,175,759	1,279,643	1,336,750	1,436,838	1,472,639	1,461,887
Institutional funds	3,386,732	3,418,267	3,887,994	4,214,995	4,562,726	5,004,902	5,575,172	5,994,753
All other sources	947,857	976,468	1,047,921	1,138,272	1,214,860	1,426,073	1,541,799	1,757,201
	Field							
Engineering	1,164,428	1,203,757	1,314,543	1,425,243	1,531,227	1,665,557	1,802,302	1,920,244
Aeronautical and astronautical	45,118	46,994	53,735	58,311	67,335	63,533	68,842	81,593
Bioengineering/biomedical	--	--	23,116	35,615	49,578	65,223	71,181	89,638
Chemical	104,989	111,324	123,383	128,223	136,228	143,095	158,175	166,331
Civil	220,023	230,619	244,316	269,402	279,984	329,181	355,243	372,751
Electrical	217,479	222,534	248,996	281,072	298,116	333,627	351,509	396,395
Mechanical	147,123	144,148	153,359	175,955	192,107	201,288	213,032	214,409
Metallurgical and materials	129,640	133,394	141,007	135,497	137,632	144,631	176,830	172,189
Other, nec	300,056	314,744	326,631	341,168	370,247	384,979	407,490	426,938
All sciences	5,685,624	5,917,234	6,538,818	6,980,832	7,426,104	8,205,963	8,867,472	9,543,174
Physical sciences	499,409	499,234	555,693	582,911	622,077	667,424	692,254	731,103
Astronomy	80,154	78,564	89,438	96,441	101,867	99,610	105,372	111,720
Chemistry	180,451	190,200	207,786	226,346	241,159	262,971	277,340	315,662
Physics	188,949	187,538	211,658	217,879	243,434	263,158	271,463	260,001
Other, nec	49,855	42,932	46,811	42,245	35,617	41,685	38,079	43,720
Environmental sciences	417,805	429,385	472,107	495,915	534,135	572,088	584,793	662,150
Atmospheric	41,903	45,229	56,207	56,058	60,764	59,848	61,305	84,106
Earth sciences	160,672	156,814	162,397	180,047	199,951	205,486	200,451	243,962
Oceanography	134,193	153,034	173,962	176,390	188,316	202,216	218,413	220,940
Other, nec	81,037	74,308	79,541	83,420	85,104	104,538	104,624	113,142
Mathematical sciences	61,463	66,566	71,143	80,381	85,992	92,209	98,664	100,824
Computer sciences	132,760	126,621	139,861	168,224	203,771	220,845	236,326	270,130
Life sciences	3,829,504	3,990,727	4,420,500	4,764,809	5,030,313	5,627,497	6,114,672	6,545,758
Agricultural sciences	1,247,472	1,315,616	1,383,815	1,422,390	1,451,524	1,556,266	1,657,294	1,693,705
Biological sciences	987,053	997,995	1,090,247	1,215,878	1,346,717	1,451,429	1,509,886	1,607,917
Medical sciences	1,463,196	1,536,283	1,792,147	1,948,504	2,067,426	2,394,825	2,703,884	2,953,397
Other, nec	131,783	140,833	154,291	178,037	164,646	224,977	243,608	290,739
Psychology	91,963	92,547	100,014	117,192	124,962	133,459	151,402	158,773
Social sciences	490,077	532,943	559,706	562,517	616,445	634,609	715,919	775,515
Economics	142,037	152,928	141,892	142,216	148,951	137,383	157,539	156,703
Political science	78,566	81,389	83,459	81,003	92,705	108,095	114,863	116,571
Sociology	90,118	89,743	109,136	109,118	118,355	126,496	139,145	161,828
Other, nec	179,356	208,883	225,219	230,180	256,434	262,635	304,372	340,413
Other sciences, nec	162,643	179,211	219,794	208,883	208,409	257,832	273,442	298,921

-- = not available.
nec = not elsewhere classified.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-12. R&D expenditures at private universities and colleges, by source of funds and science and engineering field: fiscal years 1995--2002

(Dollars in thousands)

Source and field	1995	1996	1997	1998	1999	2000	2001	2002
Total	7,219,030	7,457,993	7,944,936	8,375,875	8,869,752	9,554,835	10,388,132	11,501,935
	Source of funds							
Federal Government	5,230,595	5,373,796	5,743,182	6,077,969	6,384,781	6,881,213	7,503,538	8,466,665
State and local government	176,977	161,201	167,521	170,682	176,920	194,645	235,597	251,072
Industry	485,807	528,936	560,990	608,611	692,993	716,033	741,290	726,224
Institutional funds	660,401	751,927	809,563	787,148	835,991	935,189	1,011,436	1,114,020
All other sources	665,250	642,133	663,680	731,465	779,067	827,755	896,271	943,954
	Field							
Engineering	1,073,948	1,119,151	1,152,153	1,202,644	1,213,806	1,259,896	1,379,375	1,543,018
Aeronautical and astronautical	97,699	94,266	92,455	94,682	71,843	77,226	94,226	102,826
Bioengineering/biomedical	--	--	24,564	39,855	57,494	67,200	77,806	96,905
Chemical	91,355	90,371	79,638	81,887	94,274	103,107	114,246	113,343
Civil	69,269	72,960	72,328	69,015	81,608	91,389	101,231	112,198
Electrical	279,063	302,901	315,854	328,151	303,775	332,677	347,793	383,674
Mechanical	174,486	169,760	185,420	199,757	210,489	213,259	233,463	258,520
Metallurgical and materials	76,752	89,757	99,419	109,677	106,301	103,347	106,900	116,029
Other, nec	285,324	299,136	282,475	279,620	288,022	271,691	303,710	359,523
All sciences	6,145,082	6,338,842	6,792,783	7,173,231	7,655,946	8,294,939	9,008,757	9,958,917
Physical sciences	789,959	812,181	869,252	896,675	928,049	907,750	929,137	982,783
Astronomy	90,015	88,947	99,552	95,968	153,796	141,272	134,016	134,691
Chemistry	249,731	260,173	262,996	288,278	295,775	287,946	291,428	304,469
Physics	393,901	395,364	430,268	431,069	394,024	397,676	408,574	435,419
Other, nec	56,312	67,697	76,436	81,360	84,454	80,856	95,119	108,204
Environmental sciences	298,193	295,257	307,178	340,386	333,825	340,903	340,509	367,413
Atmospheric	32,154	31,602	32,455	41,074	51,555	53,720	54,731	54,745
Earth sciences	113,105	114,704	114,908	132,662	123,778	115,268	111,313	121,427
Oceanography	50,159	49,688	49,345	55,467	91,329	89,542	91,479	108,397
Other, nec	102,775	99,263	110,470	111,183	67,163	82,373	82,986	82,844
Mathematical sciences	110,301	113,923	111,277	114,248	118,187	126,216	125,161	128,662
Computer sciences	341,793	353,844	359,839	347,988	372,290	349,796	383,400	459,373
Life sciences	4,117,840	4,283,506	4,607,290	4,957,801	5,361,077	5,983,330	6,600,584	7,328,554
Agricultural sciences	55,164	52,012	60,454	65,030	56,382	61,337	73,731	77,935
Biological sciences	1,424,690	1,452,596	1,561,264	1,694,933	1,837,389	2,031,435	2,236,803	2,420,890
Medical sciences	2,431,051	2,574,822	2,769,763	2,976,800	3,235,794	3,634,565	4,035,443	4,545,117
Other, nec	206,935	204,076	215,809	221,038	231,512	255,993	254,607	284,612
Psychology	101,707	100,905	97,562	111,181	119,764	134,860	148,759	173,971
Social sciences	254,994	256,349	271,106	258,022	279,961	298,483	312,373	335,461
Economics	42,941	45,867	54,003	53,087	49,110	49,291	42,623	44,138
Political science	64,862	66,478	64,598	66,079	78,004	90,725	101,431	119,202
Sociology	49,163	54,635	60,334	58,033	68,531	77,210	78,624	79,014
Other, nec	98,028	89,369	92,171	80,823	84,316	81,257	89,695	93,107
Other sciences, nec	130,295	122,877	169,279	146,930	142,793	153,601	168,834	182,700

-- = not available.
nec = not elsewhere classified.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-13. Federally financed R&D expenditures at private universities and colleges, by science and engineering field: fiscal years 1995--2002

(Dollars in thousands)

Field	1995	1996	1997	1998	1999	2000	2001	2002
Total	5,230,595	5,373,796	5,743,182	6,077,969	6,384,781	6,881,213	7,503,538	8,466,665
Engineering	824,791	847,857	883,604	912,559	924,708	945,362	1,020,630	1,176,337
Aeronautical and astronautical	85,399	79,479	82,486	73,993	61,753	65,347	78,839	88,040
Bioengineering/biomedical	--	--	18,406	30,148	42,670	49,452	57,072	70,348
Chemical	60,399	58,276	52,205	52,306	60,346	65,561	73,361	78,141
Civil	44,399	46,679	45,183	40,660	48,640	56,079	59,980	71,923
Electrical	221,575	237,521	247,180	259,469	235,046	248,605	263,316	294,659
Mechanical	140,400	129,545	143,506	158,575	165,184	164,898	176,257	201,210
Metallurgical and materials	52,032	64,199	74,054	75,468	77,228	74,600	71,818	83,128
Other, nec	220,587	232,158	220,584	221,940	233,841	220,820	239,987	288,888
All sciences	4,405,804	4,525,939	4,859,578	5,165,410	5,460,073	5,935,851	6,482,908	7,290,328
Physical sciences	670,877	683,693	737,028	758,313	806,249	776,772	790,114	829,563
Astronomy	73,501	74,032	84,543	77,945	143,836	132,060	121,184	121,734
Chemistry	191,933	202,192	201,767	225,398	234,358	219,798	220,804	228,803
Physics	355,197	352,680	386,665	388,404	355,794	354,481	367,083	384,141
Other, nec	50,246	54,789	64,053	66,566	72,261	70,433	81,043	94,885
Environmental sciences	244,107	242,177	258,929	288,383	277,958	281,128	279,929	300,750
Atmospheric	29,622	28,320	29,775	37,501	46,836	48,044	47,721	47,640
Earth sciences	90,587	93,292	96,674	111,309	99,476	89,460	85,812	94,457
Oceanography	42,486	40,671	42,099	48,381	80,750	81,194	83,300	95,658
Other, nec	81,412	79,894	90,381	91,192	50,896	62,430	63,096	62,995
Mathematical sciences	97,866	100,259	94,981	98,377	100,091	106,116	106,768	109,690
Computer sciences	275,722	291,988	296,527	283,046	297,815	277,339	308,831	373,333
Life sciences	2,873,176	2,964,159	3,200,845	3,459,956	3,716,134	4,206,883	4,697,501	5,322,160
Agricultural sciences	19,793	17,086	26,494	25,216	17,250	18,444	22,591	23,435
Biological sciences	1,066,214	1,069,140	1,153,459	1,265,247	1,367,064	1,518,744	1,674,001	1,857,527
Medical sciences	1,651,112	1,744,174	1,880,964	2,012,839	2,166,174	2,484,804	2,810,034	3,224,322
Other, nec	136,057	133,759	139,928	156,654	165,646	184,891	190,875	216,876
Psychology	71,948	70,324	72,787	82,730	89,740	102,214	115,860	136,496
Social sciences	113,947	115,561	114,227	114,675	116,578	124,757	133,930	144,251
Economics	14,652	17,995	24,941	26,455	21,754	20,614	18,447	18,163
Political science	30,061	30,343	24,353	24,668	24,467	31,700	35,148	40,755
Sociology	28,563	32,664	32,726	33,304	37,489	39,596	38,180	42,292
Other, nec	40,671	34,559	32,207	30,248	32,868	32,847	42,155	43,041
Other sciences, nec	58,161	57,778	84,254	79,930	55,508	60,642	49,975	74,085

-- = not available.
nec = not elsewhere classified.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-14. Non-Federal R&D expenditures at private universities and colleges, by source of funds and science and engineering field: fiscal years 1995--2002

(Dollars in thousands)

Source and field	1995	1996	1997	1998	1999	2000	2001	2002
Total	1,988,435	2,084,197	2,201,754	2,297,906	2,484,971	2,673,622	2,884,594	3,035,270
	Source of funds							
State and local government	176,977	161,201	167,521	170,682	176,920	194,645	235,597	251,072
Industry	485,807	528,936	560,990	608,611	692,993	716,033	741,290	726,224
Institutional funds	660,401	751,927	809,563	787,148	835,991	935,189	1,011,436	1,114,020
All other sources	665,250	642,133	663,680	731,465	779,067	827,755	896,271	943,954
	Field							
Engineering	249,157	271,294	268,549	290,085	289,098	314,534	358,745	366,681
Aeronautical and astronautical	12,300	14,787	9,969	20,689	10,090	11,879	15,387	14,786
Bioengineering/biomedical	--	--	6,158	9,707	14,824	17,748	20,734	26,557
Chemical	30,956	32,095	27,433	29,581	33,928	37,546	40,885	35,202
Civil	24,870	26,281	27,145	28,355	32,968	35,310	41,251	40,275
Electrical	57,488	65,380	68,674	68,682	68,729	84,072	84,477	89,015
Mechanical	34,086	40,215	41,914	41,182	45,305	48,361	57,206	57,310
Metallurgical and materials	24,720	25,558	25,365	34,209	29,073	28,747	35,082	32,901
Other, nec	64,737	66,978	61,891	57,680	54,181	50,871	63,723	70,635
All sciences	1,739,278	1,812,903	1,933,205	2,007,821	2,195,873	2,359,088	2,525,849	2,668,589
Physical sciences	119,082	128,488	132,224	138,362	121,800	130,978	139,023	153,220
Astronomy	16,514	14,915	15,009	18,023	9,960	9,212	12,832	12,957
Chemistry	57,798	57,981	61,229	62,880	61,417	68,148	70,624	75,666
Physics	38,704	42,684	43,603	42,665	38,230	43,195	41,491	51,278
Other, nec	6,066	12,908	12,383	14,794	12,193	10,423	14,076	13,319
Environmental sciences	54,086	53,080	48,249	52,003	55,867	59,775	60,580	66,663
Atmospheric	2,532	3,282	2,680	3,573	4,719	5,676	7,010	7,105
Earth sciences	22,518	21,412	18,234	21,353	24,302	25,808	25,501	26,970
Oceanography	7,673	9,017	7,246	7,086	10,579	8,348	8,179	12,739
Other, nec	21,363	19,369	20,089	19,991	16,267	19,943	19,890	19,849
Mathematical sciences	12,435	13,664	16,296	15,871	18,096	20,100	18,393	18,972
Computer sciences	66,071	61,856	63,312	64,942	74,475	72,457	74,569	86,040
Life sciences	1,244,664	1,319,347	1,406,445	1,497,845	1,644,943	1,776,447	1,903,083	2,006,394
Agricultural sciences	35,371	34,926	33,960	39,814	39,132	42,893	51,140	54,500
Biological sciences	358,476	383,456	407,805	429,686	470,325	512,691	562,802	563,363
Medical sciences	779,939	830,648	888,799	963,961	1,069,620	1,149,761	1,225,409	1,320,795
Other, nec	70,878	70,317	75,881	64,384	65,866	71,102	63,732	67,736
Psychology	29,759	30,581	24,775	28,451	30,024	32,646	32,899	37,475
Social sciences	141,047	140,788	156,879	143,347	163,383	173,726	178,443	191,210
Economics	28,289	27,872	29,062	26,632	27,356	28,677	24,176	25,975
Political science	34,801	36,135	40,245	41,411	53,537	59,025	66,283	78,447
Sociology	20,600	21,971	27,608	24,729	31,042	37,614	40,444	36,722
Other, nec	57,357	54,810	59,964	50,575	51,448	48,410	47,540	50,066
Other sciences, nec	72,134	65,099	85,025	67,000	87,285	92,959	118,859	108,615

-- = not available.
nec = not elsewhere classified.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-15. R&D expenditures at doctorate-granting institutions, by source of funds, science and engineering field, and control: fiscal years 1995, 2001, and 2002

(Dollars in thousands)

Source and field	Total			Public			Private		
	1995	2001	2002	1995	2001	2002	1995	2001	2002
Total	21,813,974	32,256,089	35,713,964	14,690,030	22,023,576	24,377,521	7,123,944	10,232,513	11,336,443
	Source of funds								
Federal Government	13,117,586	18,900,336	21,462,506	7,945,568	11,480,243	13,093,516	5,172,018	7,420,093	8,368,990
State and local government	1,647,131	2,265,849	2,430,385	1,472,839	2,032,825	2,183,157	174,292	233,024	247,228
Industry	1,456,705	2,177,521	2,150,625	983,156	1,452,300	1,440,619	473,549	725,221	710,006
Institutional funds	3,999,814	6,529,015	7,018,787	3,352,975	5,533,778	5,922,620	646,839	995,237	1,096,167
All other sources	1,592,738	2,383,368	2,651,661	935,492	1,524,430	1,737,609	657,246	858,938	914,052
	Field								
Engineering	3,457,041	4,917,885	5,410,293	2,396,806	3,579,055	3,892,617	1,060,235	1,338,830	1,517,676
Aeronautical and astronautical	235,389	315,381	313,787	137,698	227,663	211,886	97,691	87,718	101,901
Bioengineering/biomedical	--	210,065	284,469	--	134,409	188,517	--	75,656	95,952
Chemical	294,886	410,468	427,106	204,276	298,586	315,001	90,610	111,882	112,105
Civil	417,264	658,823	710,949	348,669	560,880	602,543	68,595	97,943	108,406
Electrical	807,128	1,148,944	1,291,752	531,009	810,429	914,174	276,119	338,515	377,578
Mechanical	511,100	670,939	765,380	340,589	448,502	514,476	170,511	222,437	250,904
Metallurgical and materials	328,258	451,093	465,557	251,967	344,377	349,772	76,291	106,716	115,785
Other, nec	863,016	1,052,172	1,151,293	582,598	754,209	796,248	280,418	297,963	355,045
All sciences	18,356,933	27,338,204	30,303,671	12,293,224	18,444,521	20,484,904	6,063,709	8,893,683	9,818,767
Physical sciences	2,186,747	2,725,989	2,915,821	1,419,741	1,826,274	1,969,021	767,006	899,715	946,800
Astronomy	301,300	374,181	396,897	212,423	242,692	264,079	88,877	131,489	132,818
Chemistry	736,603	971,045	1,083,068	499,297	693,032	796,452	237,306	278,013	286,616
Physics	959,645	1,206,689	1,244,732	573,975	811,412	825,253	385,670	395,277	419,479
Other, nec	189,199	174,074	191,124	134,046	79,138	83,237	55,153	94,936	107,887
Environmental sciences	1,396,488	1,781,035	1,960,206	1,101,418	1,447,065	1,601,716	295,070	333,970	358,490
Atmospheric	204,724	296,374	338,234	173,861	243,219	284,114	30,863	53,155	54,120
Earth sciences	442,996	530,813	615,391	331,134	423,281	501,306	111,862	107,532	114,085
Oceanography	461,802	662,205	700,978	411,826	570,974	592,830	49,976	91,231	108,148
Other, nec	286,966	291,643	305,603	184,597	209,591	223,466	102,369	82,052	82,137
Mathematical sciences	267,455	341,444	365,193	161,560	223,629	244,044	105,895	117,815	121,149
Computer sciences	671,041	923,525	1,097,755	332,160	545,806	643,418	338,881	377,719	454,337
Life sciences	12,078,558	19,051,630	21,198,996	7,990,424	12,491,697	13,917,842	4,088,134	6,559,933	7,281,154
Agricultural sciences	1,774,205	2,261,436	2,349,967	1,723,630	2,193,399	2,276,967	50,575	68,037	73,000
Biological sciences	3,777,128	5,874,050	6,491,708	2,374,064	3,662,585	4,101,629	1,403,064	2,211,465	2,390,079
Medical sciences	6,063,487	10,173,302	11,485,100	3,634,884	6,145,020	6,948,964	2,428,603	4,028,282	4,536,136
Other, nec	463,738	742,842	872,221	257,846	490,693	590,282	205,892	252,149	281,939

See explanatory information and SOURCE at end of table.

TABLE B-15. R&D expenditures at doctorate-granting institutions, by source of funds, science and engineering field, and control: fiscal years 1995, 2001, and 2002

(Dollars in thousands)

Source and field	Total			Public			Private		
	1995	2001	2002	1995	2001	2002	1995	2001	2002
	Field								
Psychology	352,252	563,968	645,613	255,865	419,761	479,693	96,387	144,207	165,920
Social sciences	992,477	1,404,446	1,539,303	742,830	1,103,868	1,219,456	249,647	300,578	319,847
Economics	244,722	265,322	278,273	202,605	224,520	235,848	42,117	40,802	42,425
Political science	170,467	248,705	264,838	106,832	149,893	150,625	63,635	98,812	114,213
Sociology	207,645	318,106	366,762	160,641	242,757	290,873	47,004	75,349	75,889
Other, nec	369,643	572,313	629,430	272,752	486,698	542,110	96,891	85,615	87,320
Other sciences, nec	411,915	546,167	580,784	289,226	386,421	409,714	122,689	159,746	171,070

-- = not available.
nec = not elsewhere classified.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-16. Federally financed R&D expenditures at doctorate-granting institutions, by science and engineering field and control: fiscal years 1995, 2001, and 2002

(Dollars in thousands)

Field	Total			Public			Private		
	1995	2001	2002	1995	2001	2002	1995	2001	2002
Total	13,117,586	18,900,336	21,462,506	7,945,568	11,480,243	13,093,516	5,172,018	7,420,093	8,368,990
Engineering	2,071,611	2,798,139	3,171,957	1,251,137	1,791,456	2,004,554	820,474	1,006,683	1,167,403
Aeronautical and astronautical	178,293	231,942	229,951	92,894	159,076	142,744	85,399	72,866	87,207
Bioengineering/biomedical	--	120,071	168,940	--	63,698	98,922	--	56,373	70,018
Chemical	159,739	213,597	226,520	99,736	140,814	149,020	60,003	72,783	77,500
Civil	180,906	267,981	305,031	136,749	208,423	233,834	44,157	59,558	71,197
Electrical	535,675	720,124	811,006	315,464	460,326	519,919	220,211	259,798	291,087
Mechanical	335,256	411,152	500,877	195,955	236,573	301,576	139,301	174,579	199,301
Metallurgical and materials	174,545	239,534	260,885	122,563	167,891	177,981	51,982	71,643	82,904
Other, nec	507,197	593,738	668,747	287,776	354,655	380,558	219,421	239,083	288,189
All sciences	11,045,975	16,102,197	18,290,549	6,694,431	9,688,787	11,088,962	4,351,544	6,413,410	7,201,587
Physical sciences	1,591,896	1,920,340	2,061,414	935,654	1,147,182	1,254,549	656,242	773,158	806,865
Astronomy	205,277	256,972	273,329	132,640	137,413	152,724	72,637	119,559	120,605
Chemistry	509,701	636,509	707,746	324,701	421,628	488,135	185,000	214,881	219,611
Physics	742,696	903,160	944,491	393,640	545,350	572,513	349,056	357,810	371,978
Other, nec	134,222	123,699	135,848	84,673	42,791	41,177	49,549	80,908	94,671
Environmental sciences	942,624	1,158,586	1,261,439	700,889	883,305	967,409	241,735	275,281	294,030
Atmospheric	161,008	228,717	247,588	132,677	182,465	200,537	28,331	46,252	47,051
Earth sciences	266,631	317,424	358,605	176,799	233,863	269,795	89,832	83,561	88,810
Oceanography	326,038	441,433	475,774	283,669	358,363	380,361	42,369	83,070	95,413
Other, nec	188,947	171,012	179,472	107,744	108,614	116,716	81,203	62,398	62,756
Mathematical sciences	197,637	231,388	254,249	102,373	130,237	149,852	95,264	101,151	104,397
Computer sciences	477,025	622,008	751,741	202,931	315,642	380,949	274,094	306,366	370,792
Life sciences	7,040,161	11,083,753	12,705,707	4,188,222	6,413,925	7,417,742	2,851,939	4,669,828	5,287,965
Agricultural sciences	502,108	575,584	628,198	486,822	556,194	607,529	15,286	19,390	20,669
Biological sciences	2,453,228	3,820,529	4,341,245	1,401,116	2,164,726	2,506,983	1,052,112	1,655,803	1,834,262
Medical sciences	3,822,662	6,249,559	7,218,105	2,173,284	3,444,010	3,999,953	1,649,378	2,805,549	3,218,152
Other, nec	262,163	438,081	518,159	127,000	248,995	303,277	135,163	189,086	214,882
Psychology	235,931	383,884	456,158	168,414	271,325	326,232	67,517	112,559	129,926
Social sciences	376,695	531,605	600,810	264,698	402,347	461,754	111,997	129,258	139,056
Economics	76,472	87,311	99,023	62,053	69,621	81,604	14,419	17,690	17,419
Political science	59,199	70,432	74,419	29,185	35,815	34,480	30,014	34,617	39,939
Sociology	100,839	144,243	175,997	73,491	107,050	134,265	27,348	37,193	41,732
Other, nec	140,185	229,619	251,371	99,969	189,861	211,405	40,216	39,758	39,966
Other sciences, nec	184,006	170,633	199,031	131,250	124,824	130,475	52,756	45,809	68,556

-- = not available.
nec = not elsewhere classified.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-17. Non-Federal R&D expenditures at doctorate-granting institutions, by source of funds, science and engineering field, and control: fiscal years 1995, 2001, and 2002

(Dollars in thousands)

Source and field	Total			Public			Private		
	1995	2001	2002	1995	2001	2002	1995	2001	2002
Total	8,696,388	13,355,753	14,251,458	6,744,462	10,543,333	11,284,005	1,951,926	2,812,420	2,967,453
	Source of funds								
State and local government	1,647,131	2,265,849	2,430,385	1,472,839	2,032,825	2,183,157	174,292	233,024	247,228
Industry	1,456,705	2,177,521	2,150,625	983,156	1,452,300	1,440,619	473,549	725,221	710,006
Institutional funds	3,999,814	6,529,015	7,018,787	3,352,975	5,533,778	5,922,620	646,839	995,237	1,096,167
All other sources	1,592,738	2,383,368	2,651,661	935,492	1,524,430	1,737,609	657,246	858,938	914,052
	Field								
Engineering	1,385,430	2,119,746	2,238,336	1,145,669	1,787,599	1,888,063	239,761	332,147	350,273
Aeronautical and astronautical	57,096	83,439	83,836	44,804	68,587	69,142	12,292	14,852	14,694
Bioengineering/biomedical	--	89,994	115,529	--	70,711	89,595	--	19,283	25,934
Chemical	135,147	196,871	200,586	104,540	157,772	165,981	30,607	39,099	34,605
Civil	236,358	390,842	405,918	211,920	352,457	368,709	24,438	38,385	37,209
Electrical	271,453	428,820	480,746	215,545	350,103	394,255	55,908	78,717	86,491
Mechanical	175,844	259,787	264,503	144,634	211,929	212,900	31,210	47,858	51,603
Metallurgical and materials	153,713	211,559	204,672	129,404	176,486	171,791	24,309	35,073	32,881
Other, nec	355,819	458,434	482,546	294,822	399,554	415,690	60,997	58,880	66,856
All sciences	7,310,958	11,236,007	12,013,122	5,598,793	8,755,734	9,395,942	1,712,165	2,480,273	2,617,180
Physical sciences	594,851	805,649	854,407	484,087	679,092	714,472	110,764	126,557	139,935
Astronomy	96,023	117,209	123,568	79,783	105,279	111,355	16,240	11,930	12,213
Chemistry	226,902	334,536	375,322	174,596	271,404	308,317	52,306	63,132	67,005
Physics	216,949	303,529	300,241	180,335	266,062	252,740	36,614	37,467	47,501
Other, nec	54,977	50,375	55,276	49,373	36,347	42,060	5,604	14,028	13,216
Environmental sciences	453,864	622,449	698,767	400,529	563,760	634,307	53,335	58,689	64,460
Atmospheric	43,716	67,657	90,646	41,184	60,754	83,577	2,532	6,903	7,069
Earth sciences	176,365	213,389	256,786	154,335	189,418	231,511	22,030	23,971	25,275
Oceanography	135,764	220,772	225,204	128,157	212,611	212,469	7,607	8,161	12,735
Other, nec	98,019	120,631	126,131	76,853	100,977	106,750	21,166	19,654	19,381
Mathematical sciences	69,818	110,056	110,944	59,187	93,392	94,192	10,631	16,664	16,752
Computer sciences	194,016	301,517	346,014	129,229	230,164	262,469	64,787	71,353	83,545
Life sciences	5,038,397	7,967,877	8,493,289	3,802,202	6,077,772	6,500,100	1,236,195	1,890,105	1,993,189
Agricultural sciences	1,272,097	1,685,852	1,721,769	1,236,808	1,637,205	1,669,438	35,289	48,647	52,331
Biological sciences	1,323,900	2,053,521	2,150,463	972,948	1,497,859	1,594,646	350,952	555,662	555,817
Medical sciences	2,240,825	3,923,743	4,266,995	1,461,600	2,701,010	2,949,011	779,225	1,222,733	1,317,984
Other, nec	201,575	304,761	354,062	130,846	241,698	287,005	70,729	63,063	67,057

See explanatory information and SOURCE at end of table.

TABLE B-17. Non-Federal R&D expenditures at doctorate-granting institutions, by source of funds, science and engineering field, and control: fiscal years 1995, 2001, and 2002

(Dollars in thousands)

Source and field	Total			Public			Private		
	1995	2001	2002	1995	2001	2002	1995	2001	2002
	Field								
Psychology	116,321	180,084	189,455	87,451	148,436	153,461	28,870	31,648	35,994
Social sciences	615,782	872,841	938,493	478,132	701,521	757,702	137,650	171,320	180,791
Economics	168,250	178,011	179,250	140,552	154,899	154,244	27,698	23,112	25,006
Political science	111,268	178,273	190,419	77,647	114,078	116,145	33,621	64,195	74,274
Sociology	106,806	173,863	190,765	87,150	135,707	156,608	19,656	38,156	34,157
Other, nec	229,458	342,694	378,059	172,783	296,837	330,705	56,675	45,857	47,354
Other sciences, nec	227,909	375,534	381,753	157,976	261,597	279,239	69,933	113,937	102,514

-- = not available.
nec = not elsewhere classified.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-18. R&D expenditures at historically black colleges and universities, by source of funds and science and engineering field: fiscal years 1995--2002

(Dollars in thousands)

Source and field	1995	1996	1997	1998	1999	2000	2001	2002
Total	241,434	263,508	290,369	293,190	254,825	263,863	317,668	360,667
	Source of funds							
Federal Government	199,335	222,262	254,256	248,621	216,508	227,930	271,848	305,720
State and local government	11,162	11,842	11,346	12,908	6,877	10,699	11,602	18,718
Industry	6,481	6,450	5,182	5,030	5,388	6,084	7,158	10,058
Institutional funds	21,050	19,697	13,962	10,708	14,686	13,850	20,174	21,335
All other sources	3,406	3,257	5,623	15,923	11,366	5,300	6,886	4,836
	Field							
Engineering	35,433	42,823	49,739	48,164	31,905	29,411	33,602	32,886
Aeronautical and astronautical	2,240	2,544	2,514	2,673	3,923	3,607	3,583	2,392
Bioengineering/biomedical	--	--	164	183	56	883	919	147
Chemical	2,070	2,203	5,010	4,660	2,643	2,979	3,313	2,851
Civil	3,408	4,045	5,003	3,963	3,840	3,228	3,990	5,056
Electrical	8,089	11,106	8,749	8,191	6,531	6,136	7,706	9,296
Mechanical	9,548	10,849	16,704	17,899	8,186	6,705	7,374	7,097
Metallurgical and materials	1,614	2,212	3,561	2,518	379	167	0	25
Other, nec	8,464	9,864	8,034	8,077	6,347	5,706	6,717	6,022
All sciences	206,001	220,685	240,630	245,026	222,920	234,452	284,066	327,781
Physical sciences	41,401	40,225	47,801	46,815	48,920	40,578	44,749	44,764
Astronomy	4,295	5,853	7,269	4,384	4,567	4,306	2,403	2,155
Chemistry	14,797	15,169	16,534	21,772	22,985	14,076	14,394	15,935
Physics	21,297	18,935	23,633	20,206	20,800	22,133	26,909	25,516
Other, nec	1,012	268	365	453	568	63	1,043	1,158
Environmental sciences	15,562	17,218	14,214	14,700	11,327	11,226	13,493	12,165
Atmospheric	743	767	1,129	1,810	1,871	4,036	1,726	3,122
Earth sciences	1,756	2,509	1,753	2,958	2,443	2,850	6,013	5,373
Oceanography	587	299	185	173	447	940	1,530	2,051
Other, nec	12,476	13,643	11,147	9,759	6,566	3,400	4,224	1,619
Mathematical sciences	5,709	6,504	6,358	5,248	5,054	5,675	6,416	7,703
Computer sciences	8,837	16,906	15,738	14,299	15,916	14,568	19,988	13,419
Life sciences	107,772	121,029	138,353	143,599	124,574	139,374	167,171	202,112
Agricultural sciences	49,035	48,015	58,412	60,086	48,706	51,995	63,355	77,556
Biological sciences	43,517	51,172	54,739	57,852	45,581	48,390	62,709	73,806
Medical sciences	13,110	18,361	21,871	21,009	25,449	30,604	34,994	45,832
Other, nec	2,110	3,481	3,331	4,652	4,838	8,385	6,113	4,918
Psychology	3,947	2,019	1,135	1,002	2,275	1,700	4,865	5,712
Social sciences	10,228	9,528	9,666	7,920	8,347	11,069	13,309	10,843
Economics	3,196	1,175	1,426	1,156	1,344	1,432	2,142	2,086
Political science	438	749	987	464	299	731	544	372
Sociology	3,593	4,691	2,964	3,033	2,877	4,259	4,180	4,304
Other, nec	3,001	2,913	4,289	3,267	3,827	4,647	6,443	4,081
Other sciences, nec	12,545	7,256	7,365	11,443	6,507	10,262	14,075	31,063

-- = not available.
nec = not elsewhere classified.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-19. Federally financed R&D expenditures at historically black colleges and universities, by science and engineering field: fiscal years 1995--2002

(Dollars in thousands)

Field	1995	1996	1997	1998	1999	2000	2001	2002
Total	199,335	222,262	254,256	248,621	216,508	227,930	271,848	305,720
Engineering	30,955	37,300	45,068	41,139	27,644	25,479	28,561	28,198
Aeronautical and astronautical	2,069	2,128	2,433	2,370	3,619	3,530	3,509	2,171
Bioengineering/biomedical	--	--	159	183	56	568	470	139
Chemical	1,803	1,891	4,511	3,668	2,171	2,765	3,109	2,477
Civil	2,582	2,507	3,781	3,139	2,844	2,246	2,694	4,070
Electrical	7,467	10,302	8,492	7,730	5,579	5,342	6,873	8,222
Mechanical	8,566	9,685	15,077	14,657	7,423	6,189	6,784	6,034
Metallurgical and materials	1,526	1,862	3,269	2,370	302	162	0	25
Other, nec	6,942	8,925	7,346	7,022	5,650	4,677	5,122	5,060
All sciences	168,380	184,962	209,188	207,482	188,864	202,451	243,287	277,522
Physical sciences	36,143	35,277	43,101	41,314	43,851	36,317	40,406	39,176
Astronomy	4,095	5,730	7,246	4,371	4,209	3,874	1,940	1,685
Chemistry	12,880	13,019	14,014	18,752	21,215	12,908	13,380	14,022
Physics	18,263	16,312	21,511	17,979	17,920	19,528	24,181	22,483
Other, nec	905	216	330	212	507	7	905	986
Environmental sciences	5,517	12,488	11,134	11,926	8,182	9,318	10,947	9,704
Atmospheric	348	434	825	1,766	1,818	3,996	1,550	2,884
Earth sciences	1,094	1,348	721	1,623	1,042	1,798	3,908	3,767
Oceanography	286	183	91	79	383	824	1,383	1,877
Other, nec	3,789	10,523	9,497	8,458	4,939	2,700	4,106	1,176
Mathematical sciences	4,291	4,261	4,328	2,530	2,747	4,369	4,254	5,056
Computer sciences	6,958	13,352	13,779	12,378	13,747	12,796	18,580	12,140
Life sciences	94,306	104,830	121,970	123,460	109,349	121,891	144,839	176,410
Agricultural sciences	42,445	41,803	50,303	47,640	40,446	43,684	49,316	62,418
Biological sciences	39,511	44,627	49,223	53,175	42,388	44,956	58,918	71,241
Medical sciences	11,263	16,119	20,730	18,904	22,886	26,848	31,604	39,673
Other, nec	1,087	2,281	1,714	3,741	3,629	6,403	5,001	3,078
Psychology	3,665	1,729	1,025	979	1,777	1,334	4,534	5,403
Social sciences	7,234	6,475	7,151	5,506	5,270	8,132	9,995	7,861
Economics	2,904	1,014	1,258	1,063	1,171	1,118	1,926	1,675
Political science	173	425	457	254	134	508	405	117
Sociology	2,588	3,587	2,177	2,006	1,490	3,379	3,569	3,505
Other, nec	1,569	1,449	3,259	2,183	2,475	3,127	4,095	2,564
Other sciences, nec	10,266	6,550	6,700	9,389	3,941	8,294	9,732	21,772

-- = not available.
nec = not elsewhere classified.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-20. Non-Federal R&D expenditures at historically black colleges and universities, by source of funds and science and engineering field: fiscal years 1995--2002

(Dollars in thousands)

Source and field	1995	1996	1997	1998	1999	2000	2001	2002
Total	42,099	41,246	36,113	44,569	38,317	35,933	45,820	54,947
	Source of funds							
State and local government	11,162	11,842	11,346	12,908	6,877	10,699	11,602	18,718
Industry	6,481	6,450	5,182	5,030	5,388	6,084	7,158	10,058
Institutional funds	21,050	19,697	13,962	10,708	14,686	13,850	20,174	21,335
All other sources	3,406	3,257	5,623	15,923	11,366	5,300	6,886	4,836
	Field							
Engineering	4,478	5,523	4,671	7,025	4,261	3,932	5,041	4,688
Aeronautical and astronautical	171	416	81	303	304	77	74	221
Bioengineering/biomedical	--	--	5	0	0	315	449	8
Chemical	267	312	499	992	472	214	204	374
Civil	826	1,538	1,222	824	996	982	1,296	986
Electrical	622	804	257	461	952	794	833	1,074
Mechanical	982	1,164	1,627	3,242	763	516	590	1,063
Metallurgical and materials	88	350	292	148	77	5	0	0
Other, nec	1,522	939	688	1,055	697	1,029	1,595	962
All sciences	37,621	35,723	31,442	37,544	34,056	32,001	40,779	50,259
Physical sciences	5,258	4,948	4,700	5,501	5,069	4,261	4,343	5,588
Astronomy	200	123	23	13	358	432	463	470
Chemistry	1,917	2,150	2,520	3,020	1,770	1,168	1,014	1,913
Physics	3,034	2,623	2,122	2,227	2,880	2,605	2,728	3,033
Other, nec	107	52	35	241	61	56	138	172
Environmental sciences	10,045	4,730	3,080	2,774	3,145	1,908	2,546	2,461
Atmospheric	395	333	304	44	53	40	176	238
Earth sciences	662	1,161	1,032	1,335	1,401	1,052	2,105	1,606
Oceanography	301	116	94	94	64	116	147	174
Other, nec	8,687	3,120	1,650	1,301	1,627	700	118	443
Mathematical sciences	1,418	2,243	2,030	2,718	2,307	1,306	2,162	2,647
Computer sciences	1,879	3,554	1,959	1,921	2,169	1,772	1,408	1,279
Life sciences	13,466	16,199	16,383	20,139	15,225	17,483	22,332	25,702
Agricultural sciences	6,590	6,212	8,109	12,446	8,260	8,311	14,039	15,138
Biological sciences	4,006	6,545	5,516	4,677	3,193	3,434	3,791	2,565
Medical sciences	1,847	2,242	1,141	2,105	2,563	3,756	3,390	6,159
Other, nec	1,023	1,200	1,617	911	1,209	1,982	1,112	1,840
Psychology	282	290	110	23	498	366	331	309
Social sciences	2,994	3,053	2,515	2,414	3,077	2,937	3,314	2,982
Economics	292	161	168	93	173	314	216	411
Political science	265	324	530	210	165	223	139	255
Sociology	1,005	1,104	787	1,027	1,387	880	611	799
Other, nec	1,432	1,464	1,030	1,084	1,352	1,520	2,348	1,517
Other sciences, nec	2,279	706	665	2,054	2,566	1,968	4,343	9,291

-- = not available.
nec = not elsewhere classified.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-21. R&D expenditures at universities and colleges, by geographic division and source: fiscal year 2002

(Dollars in millions)

Division	Total	Federal	Non-Federal
Total	36,333	21,834	14,499
New England	2,786	1,974	812
Middle Atlantic	5,370	3,444	1,926
East North Central	5,247	2,900	2,347
West North Central	2,407	1,297	1,109
South Atlantic	6,849	4,131	2,718
East South Central	1,613	1,010	603
West South Central	3,440	1,785	1,655
Mountain	2,213	1,415	798
Pacific	6,318	3,814	2,504
Outlying areas	89	63	26

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-22. R&D expenditures at doctorate-granting institutions, by geographic division, State, and source of funds: fiscal year 2002

(Dollars in thousands)

Division and State	Total	Federal Government	State and local governments	Industry	Institu-tional funds	All other sources
Total	35,713,964	21,462,506	2,430,385	2,150,625	7,018,787	2,651,661
New England	2,750,337	1,956,295	84,005	192,253	267,336	250,448
Connecticut	532,990	371,901	8,804	23,205	67,929	61,151
Maine	62,149	23,732	10,366	4,030	20,983	3,038
Massachusetts	1,683,483	1,250,457	46,313	144,934	86,190	155,589
New Hampshire	220,061	138,084	7,870	10,389	42,231	21,487
Rhode Island	163,052	113,841	6,293	2,538	35,622	4,758
Vermont	88,602	58,280	4,359	7,157	14,381	4,425
Middle Atlantic	5,285,067	3,386,681	273,054	313,661	847,455	464,216
New Jersey	678,062	313,689	62,234	32,915	194,923	74,301
New York	2,719,479	1,747,456	133,769	123,785	447,440	267,029
Pennsylvania	1,887,526	1,325,536	77,051	156,961	205,092	122,886
East North Central	5,188,655	2,877,950	342,447	259,551	1,318,900	389,807
Illinois	1,415,092	829,395	91,033	53,714	344,251	96,699
Indiana	642,457	275,395	54,494	43,278	225,268	44,022
Michigan	1,225,238	697,070	69,122	62,785	304,422	91,839
Ohio	1,112,327	639,820	78,541	80,229	228,820	84,917
Wisconsin	793,541	436,270	49,257	19,545	216,139	72,330
West North Central	2,384,278	1,286,375	207,573	133,539	619,312	137,479
Iowa	481,351	254,944	55,957	35,322	112,647	22,481
Kansas	297,777	133,338	43,999	13,587	91,379	15,474
Minnesota	494,508	295,461	60,705	26,577	74,285	37,480
Missouri	699,786	445,105	25,512	30,164	160,592	38,413
Nebraska	266,633	89,214	9,791	21,104	129,763	16,761
North Dakota	106,078	46,418	2,569	6,505	46,964	3,622
South Dakota	38,145	21,895	9,040	280	3,682	3,248
South Atlantic	6,765,430	4,065,523	484,972	497,390	1,368,213	349,332
Delaware	85,157	48,183	3,933	5,661	18,239	9,141
District of Columbia	245,428	201,157	3,362	12,423	9,296	19,190
Florida	1,069,023	547,592	116,491	65,421	275,420	64,099
Georgia	1,060,591	520,931	78,790	94,416	312,498	53,956
Maryland	1,875,194	1,400,456	58,320	82,214	237,718	96,486
North Carolina	1,268,652	719,992	115,404	155,483	230,160	47,613
South Carolina	389,978	176,380	25,797	27,024	143,695	17,082
Virginia	674,955	391,936	80,907	47,937	112,835	41,340
West Virginia	96,452	58,896	1,968	6,811	28,352	425
East South Central	1,563,652	971,881	137,538	58,587	317,794	77,852
Alabama	482,720	347,845	6,740	18,856	91,665	17,614
Kentucky	318,437	139,763	43,655	8,549	96,816	29,654
Mississippi	277,620	171,732	37,808	10,683	52,804	4,593
Tennessee	484,875	312,541	49,335	20,499	76,509	25,991
West South Central	3,370,882	1,739,027	426,538	236,227	629,593	339,497
Arkansas	133,781	58,619	39,587	9,073	18,855	7,647
Louisiana	476,375	196,571	95,849	30,302	108,026	45,627
Oklahoma	275,963	107,294	39,764	19,473	93,459	15,973
Texas	2,484,763	1,376,543	251,338	177,379	409,253	270,250

See explanatory information and SOURCE at end of table.

TABLE B-22. R&D expenditures at doctorate-granting institutions, by geographic division, State, and source of funds: fiscal year 2002

(Dollars in thousands)

Division and State	Total	Federal Government	State and local governments	Industry	Institu-tional funds	All other sources
Mountain	2,176,986	1,401,048	125,750	108,445	439,651	102,092
Arizona	531,106	287,052	14,553	31,455	171,237	26,809
Colorado	617,093	475,572	24,123	33,225	58,756	25,417
Idaho	93,323	42,376	21,328	7,469	21,077	1,073
Montana	117,578	62,598	21,597	7,413	24,212	1,758
Nevada	126,713	85,085	5,925	4,120	28,370	3,213
New Mexico	289,985	193,430	13,471	10,936	64,449	7,699
Utah	359,556	234,918	22,715	11,246	55,334	35,343
Wyoming	41,632	20,017	2,038	2,581	16,216	780
Pacific	6,158,391	3,729,715	344,245	348,081	1,197,019	539,331
Alaska	116,279	66,169	3,117	22,907	24,086	0
California	4,758,520	2,738,083	254,315	253,002	1,021,318	491,802
Hawaii	161,823	110,882	29,126	9,957	11,858	0
Oregon	382,027	271,162	41,610	11,712	35,924	21,619
Washington	739,742	543,419	16,077	50,503	103,833	25,910
Outlying areas	70,286	48,011	4,263	2,891	13,514	1,607

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-23. R&D expenditures at doctorate-granting institutions, by geographic division and State: fiscal years 1995--2002

(Dollars in thousands)

Division and State	1995	1996	1997	1998	1999	2000	2001	2002
Total	21,813,974	22,668,439	23,953,725	25,405,667	27,084,152	29,613,610	32,256,089	35,713,964
New England	1,804,527	1,859,407	1,976,396	2,048,610	2,147,460	2,329,915	2,530,399	2,750,337
Connecticut	377,225	388,134	392,668	402,671	415,182	464,524	492,794	532,990
Maine	31,901	34,684	33,144	33,106	41,452	54,821	64,070	62,149
Massachusetts	1,148,855	1,177,026	1,271,576	1,325,699	1,378,774	1,466,500	1,558,338	1,683,483
New Hampshire	93,073	98,638	107,505	117,323	127,135	150,982	196,975	220,061
Rhode Island	99,408	107,266	111,977	111,979	120,868	129,697	142,625	163,052
Vermont	54,065	53,659	59,526	57,832	64,049	63,391	75,597	88,602
Middle Atlantic	3,313,283	3,373,649	3,481,770	3,695,371	3,923,318	4,341,113	4,701,151	5,285,067
New Jersey	440,042	452,917	462,052	484,260	520,600	566,022	607,702	678,062
New York	1,735,706	1,733,026	1,780,679	1,882,599	2,030,110	2,242,340	2,425,422	2,719,479
Pennsylvania	1,137,535	1,187,706	1,239,039	1,328,512	1,372,608	1,532,751	1,668,027	1,887,526
East North Central	3,077,798	3,240,867	3,431,335	3,645,896	3,876,802	4,228,769	4,646,390	5,188,655
Illinois	812,287	862,321	926,515	1,011,054	1,086,793	1,157,321	1,268,364	1,415,092
Indiana	375,719	389,982	400,243	424,722	458,717	503,422	565,487	642,457
Michigan	775,260	809,218	843,684	877,819	916,028	1,001,761	1,101,475	1,225,238
Ohio	641,550	693,786	763,604	805,015	826,336	913,660	992,336	1,112,327
Wisconsin	472,982	485,560	497,289	527,286	588,928	652,605	718,728	793,541
West North Central	1,475,739	1,514,263	1,618,559	1,674,919	1,810,900	1,995,060	2,197,565	2,384,278
Iowa	320,604	330,458	340,149	356,245	369,109	414,551	436,923	481,351
Kansas	181,496	181,775	197,586	211,465	232,887	256,673	266,639	297,777
Minnesota	336,805	341,468	363,392	360,629	371,462	411,523	462,220	494,508
Missouri	397,192	404,875	459,405	478,295	544,862	609,304	673,617	699,786
Nebraska	158,633	158,398	177,373	186,200	205,363	208,334	241,407	266,633
North Dakota	59,617	71,849	56,096	56,945	61,695	67,406	84,574	106,078
South Dakota	21,392	25,440	24,558	25,140	25,522	27,269	32,185	38,145
South Atlantic	4,144,655	4,282,445	4,574,763	4,797,447	5,100,128	5,501,392	6,030,154	6,765,430
Delaware	53,161	54,154	65,095	69,896	73,521	74,711	77,491	85,157
District of Columbia	181,461	201,445	214,019	227,636	218,044	241,339	223,285	245,428
Florida	604,103	638,102	702,184	705,197	780,925	842,398	968,374	1,069,023
Georgia	669,507	712,188	766,346	794,691	828,886	913,704	973,088	1,060,591
Maryland	1,204,257	1,240,128	1,276,293	1,323,002	1,382,260	1,501,641	1,638,869	1,875,194
North Carolina	714,374	754,297	815,042	887,787	997,300	1,030,361	1,124,568	1,268,652
South Carolina	220,088	217,881	219,000	240,875	260,995	284,544	350,545	389,978
Virginia	444,305	409,044	453,146	485,830	494,640	540,201	595,276	674,955
West Virginia	53,399	55,206	63,638	62,533	63,557	72,493	78,658	96,452
East South Central	883,136	932,162	981,151	1,089,345	1,169,145	1,289,819	1,395,257	1,563,652
Alabama	327,403	342,021	368,602	402,502	405,323	417,297	436,755	482,720
Kentucky	134,784	148,376	158,238	200,682	231,085	266,916	285,633	318,437
Mississippi	112,794	124,675	124,601	145,717	168,059	207,163	250,485	277,620
Tennessee	308,155	317,090	329,710	340,444	364,678	398,443	422,384	484,875
West South Central	2,088,855	2,142,209	2,239,404	2,340,390	2,515,184	2,781,449	3,025,206	3,370,882
Arkansas	88,667	94,006	103,134	112,135	107,178	126,252	136,064	133,781
Louisiana	328,173	318,587	342,516	349,804	372,138	403,674	433,628	476,375
Oklahoma	186,371	201,626	186,702	206,627	235,286	249,357	251,559	275,963
Texas	1,485,644	1,527,990	1,607,052	1,671,824	1,800,582	2,002,166	2,203,955	2,484,763

See explanatory information and SOURCE at end of table.

TABLE B-23. R&D expenditures at doctorate-granting institutions, by geographic division and State: fiscal years 1995--2002

(Dollars in thousands)

Division and State	1995	1996	1997	1998	1999	2000	2001	2002
Mountain	1,463,043	1,468,771	1,535,071	1,641,813	1,726,031	1,866,528	2,018,318	2,176,986
Arizona	380,216	375,881	376,818	405,999	439,286	465,777	500,548	531,106
Colorado	394,065	406,203	427,435	483,388	501,562	537,493	564,479	617,093
Idaho	61,906	68,032	66,288	72,395	71,674	73,726	82,496	93,323
Montana	66,879	71,518	70,591	72,425	79,847	94,914	103,128	117,578
Nevada	86,902	84,970	88,331	83,888	91,485	106,154	115,934	126,713
New Mexico	230,393	213,691	219,150	226,071	221,788	237,311	271,974	289,985
Utah	202,212	207,923	238,705	249,147	273,192	308,059	338,127	359,556
Wyoming	40,470	40,553	47,753	48,500	47,197	43,094	41,632	41,632
Pacific	3,493,302	3,781,947	4,038,829	4,384,284	4,724,641	5,205,036	5,647,894	6,158,391
Alaska	72,216	71,381	70,943	75,606	88,825	102,500	110,195	116,279
California	2,598,112	2,818,142	3,049,517	3,314,575	3,573,237	3,963,313	4,319,634	4,758,520
Hawaii	78,429	111,202	120,107	148,007	156,810	161,300	156,976	161,823
Oregon	258,575	276,109	290,603	312,483	326,167	343,785	363,526	382,027
Washington	485,970	505,113	507,659	533,613	579,602	634,138	697,563	739,742
Outlying areas	69,636	72,719	76,447	87,592	90,543	74,529	63,755	70,286

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-24. Federally financed R&D expenditures at doctorate-granting institutions, by geographic division and State: fiscal years 1995--2002

(Dollars in thousands)

Division and State	1995	1996	1997	1998	1999	2000	2001	2002
Total	13,117,586	13,612,776	14,059,817	14,878,982	15,827,630	17,241,158	18,900,336	21,462,506
New England	1,235,543	1,251,886	1,355,533	1,433,429	1,493,941	1,606,136	1,746,033	1,956,295
Connecticut	227,915	233,933	242,385	261,929	272,839	302,850	325,186	371,901
Maine	15,789	16,211	15,066	13,028	19,163	24,412	23,873	23,732
Massachusetts	827,395	830,227	917,341	978,309	1,007,015	1,055,213	1,131,468	1,250,457
New Hampshire	60,131	62,987	67,282	70,966	77,327	95,290	115,067	138,084
Rhode Island	71,381	77,007	79,417	77,737	81,512	88,510	101,629	113,841
Vermont	32,932	31,521	34,042	31,460	36,085	39,861	48,810	58,280
Middle Atlantic	2,071,077	2,122,467	2,175,668	2,289,246	2,446,045	2,722,299	2,933,200	3,386,681
New Jersey	207,257	215,525	224,084	227,706	239,702	256,896	269,378	313,689
New York	1,110,738	1,113,747	1,145,502	1,195,737	1,310,760	1,443,416	1,532,344	1,747,456
Pennsylvania	753,082	793,195	806,082	865,803	895,583	1,021,987	1,131,478	1,325,536
East North Central	1,728,541	1,790,242	1,894,206	2,000,013	2,128,147	2,292,897	2,540,504	2,877,950
Illinois	463,631	492,351	529,117	574,963	618,342	672,822	733,648	829,395
Indiana	197,910	203,390	209,071	213,288	222,787	228,073	246,179	275,395
Michigan	421,317	425,796	454,396	472,894	506,440	551,488	619,516	697,070
Ohio	375,061	390,708	417,921	442,078	471,673	495,341	558,751	639,820
Wisconsin	270,622	277,997	283,701	296,790	308,905	345,173	382,410	436,270
West North Central	734,135	759,672	804,401	823,798	891,037	1,014,497	1,127,981	1,286,375
Iowa	162,521	160,550	161,472	166,510	177,126	202,087	218,650	254,944
Kansas	70,026	68,823	75,116	80,214	88,634	105,363	114,218	133,338
Minnesota	194,953	199,068	200,297	204,899	207,780	230,012	264,378	295,461
Missouri	212,750	232,258	271,199	274,704	317,589	368,380	407,017	445,105
Nebraska	55,421	52,186	61,231	62,578	61,226	65,653	76,361	89,214
North Dakota	27,841	35,659	24,207	23,191	25,923	29,343	30,950	46,418
South Dakota	10,623	11,128	10,879	11,702	12,759	13,659	16,407	21,895
South Atlantic	2,550,358	2,624,676	2,677,864	2,844,238	2,972,457	3,152,863	3,508,890	4,065,523
Delaware	27,352	29,509	32,031	33,688	34,628	37,716	41,830	48,183
District of Columbia	132,770	147,212	153,846	161,698	169,373	183,321	188,538	201,157
Florida	317,081	315,555	340,541	351,088	390,756	402,168	450,347	547,592
Georgia	306,745	335,769	347,407	363,140	371,177	407,393	460,261	520,931
Maryland	912,668	928,101	940,562	1,007,296	1,053,523	1,084,937	1,190,690	1,400,456
North Carolina	451,666	463,062	460,477	507,303	524,327	569,713	645,935	719,992
South Carolina	109,443	120,015	102,887	107,258	106,551	124,608	161,086	176,380
Virginia	262,169	254,419	270,490	287,757	295,792	309,376	334,783	391,936
West Virginia	30,464	31,034	29,623	25,010	26,330	33,631	35,420	58,896
East South Central	504,040	536,289	567,698	605,740	636,326	703,181	828,919	971,881
Alabama	189,847	213,580	230,894	253,186	253,057	267,581	304,689	347,845
Kentucky	59,811	64,756	75,649	76,003	81,720	92,012	111,686	139,763
Mississippi	62,585	62,497	62,350	73,329	87,630	107,689	146,720	171,732
Tennessee	191,797	195,456	198,805	203,222	213,919	235,899	265,824	312,541
West South Central	990,892	1,038,973	1,102,951	1,151,686	1,234,408	1,393,935	1,535,298	1,739,027
Arkansas	33,427	32,917	35,146	38,165	42,467	55,227	60,989	58,619
Louisiana	143,733	132,978	137,059	141,939	151,054	168,260	179,461	196,571
Oklahoma	59,504	72,817	71,421	81,689	86,046	90,872	93,241	107,294
Texas	754,228	800,261	859,325	889,893	954,841	1,079,576	1,201,607	1,376,543

See explanatory information and SOURCE at end of table.

TABLE B-24. Federally financed R&D expenditures at doctorate-granting institutions, by geographic division and State: fiscal years 1995--2002

(Dollars in thousands)

Division and State	1995	1996	1997	1998	1999	2000	2001	2002
Mountain	883,201	865,038	901,063	977,357	1,065,685	1,180,108	1,272,770	1,401,048
Arizona	210,475	199,889	198,097	210,170	239,142	244,938	265,716	287,052
Colorado	263,802	269,866	289,514	327,481	356,940	422,512	432,507	475,572
Idaho	21,307	20,410	20,476	25,444	28,116	28,888	34,347	42,376
Montana	27,382	29,258	31,261	35,730	40,858	48,942	54,051	62,598
Nevada	47,708	46,713	43,934	45,496	51,387	60,005	69,085	85,085
New Mexico	156,554	137,607	144,639	149,911	152,570	166,167	183,884	193,430
Utah	140,600	146,304	158,139	165,319	177,563	192,100	213,163	234,918
Wyoming	15,373	14,991	15,003	17,806	19,109	16,556	20,017	20,017
Pacific	2,380,446	2,581,323	2,537,385	2,708,200	2,908,774	3,132,439	3,361,833	3,729,715
Alaska	37,285	30,351	28,127	31,505	34,647	46,605	55,287	66,169
California	1,800,520	1,947,952	1,875,993	1,989,528	2,138,731	2,307,016	2,470,740	2,738,083
Hawaii	44,238	66,902	72,421	86,886	93,418	95,419	97,716	110,882
Oregon	158,076	174,616	195,030	213,480	229,256	245,336	254,327	271,162
Washington	340,327	361,502	365,814	386,801	412,722	438,063	483,763	543,419
Outlying areas	39,353	42,210	43,048	45,275	50,810	42,803	44,908	48,011

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-25. State and local government-financed R&D expenditures at doctorate-granting institutions, by geographic division and State: fiscal years 1995--2002

(Dollars in thousands)

Division and State	1995	1996	1997	1998	1999	2000	2001	2002
Total	1,647,131	1,769,032	1,863,310	1,893,168	1,949,020	2,155,676	2,265,849	2,430,385
New England	42,583	57,780	56,889	60,421	61,973	78,669	82,443	84,005
Connecticut	18,732	19,938	13,730	13,157	10,783	15,124	14,775	8,804
Maine	2,005	1,594	1,551	1,796	1,389	5,872	7,886	10,366
Massachusetts	13,443	25,244	29,774	31,663	33,637	40,100	38,025	46,313
New Hampshire	3,963	7,308	7,990	8,300	8,961	9,747	12,194	7,870
Rhode Island	1,986	1,172	1,161	2,857	4,485	4,564	5,511	6,293
Vermont	2,454	2,524	2,683	2,648	2,718	3,262	4,052	4,359
Middle Atlantic	173,942	163,458	159,424	161,083	178,853	189,179	226,714	273,054
New Jersey	39,535	42,834	37,274	39,773	45,013	46,015	52,105	62,234
New York	99,617	83,821	80,675	78,789	82,195	99,448	124,276	133,769
Pennsylvania	34,790	36,803	41,475	42,521	51,645	43,716	50,333	77,051
East North Central	209,683	216,354	239,790	249,080	256,228	297,135	313,106	342,447
Illinois	47,279	47,358	53,968	49,572	60,265	71,372	81,109	91,033
Indiana	22,463	23,232	23,826	25,517	27,877	34,369	45,428	54,494
Michigan	51,836	48,587	50,845	56,061	57,543	62,929	66,453	69,122
Ohio	45,556	55,084	70,078	74,406	67,991	83,373	80,080	78,541
Wisconsin	42,549	42,093	41,073	43,524	42,552	45,092	40,036	49,257
West North Central	208,006	215,434	225,871	226,345	197,719	193,300	203,401	207,573
Iowa	46,935	49,456	52,435	52,700	53,114	55,838	59,206	55,957
Kansas	39,353	40,456	45,002	46,941	50,300	43,329	44,617	43,999
Minnesota	49,543	47,842	50,539	47,118	49,082	52,346	58,053	60,705
Missouri	21,486	21,691	21,342	23,506	24,812	25,619	24,037	25,512
Nebraska	42,383	45,388	47,142	46,602	10,648	7,226	7,007	9,791
North Dakota	1,534	1,555	1,070	1,123	1,965	2,417	1,440	2,569
South Dakota	6,772	9,046	8,341	8,355	7,798	6,525	9,041	9,040
South Atlantic	346,904	401,984	433,857	424,857	448,796	479,004	474,135	484,972
Delaware	2,144	2,410	2,977	4,600	5,310	4,032	4,469	3,933
District of Columbia	814	1,446	1,267	1,593	2,582	3,328	2,679	3,362
Florida	41,466	83,234	90,076	79,258	90,393	102,392	108,876	116,491
Georgia	55,663	61,862	68,844	69,604	73,687	76,599	78,060	78,790
Maryland	79,375	84,411	82,072	62,896	76,138	82,069	59,492	58,320
North Carolina	100,671	105,953	118,663	128,155	121,462	112,580	119,344	115,404
South Carolina	17,899	20,887	20,697	27,069	26,593	31,503	29,517	25,797
Virginia	46,849	39,492	46,848	48,728	49,482	63,594	69,282	80,907
West Virginia	2,023	2,289	2,413	2,954	3,149	2,907	2,416	1,968
East South Central	75,753	82,190	79,932	86,605	90,715	104,209	128,308	137,538
Alabama	6,991	5,789	5,251	7,071	8,923	6,052	5,485	6,740
Kentucky	9,589	11,467	7,446	14,254	12,441	20,840	39,866	43,655
Mississippi	23,778	29,173	29,324	29,455	31,155	38,833	39,290	37,808
Tennessee	35,395	35,761	37,911	35,825	38,196	38,484	43,667	49,335
West South Central	281,824	304,906	315,844	324,656	333,242	374,781	382,755	426,538
Arkansas	24,233	26,073	29,690	33,089	32,499	35,045	36,862	39,587
Louisiana	72,021	72,499	75,423	78,073	79,506	76,613	83,856	95,849
Oklahoma	19,699	30,472	35,622	37,406	41,610	42,142	40,305	39,764
Texas	165,871	175,862	175,109	176,088	179,627	220,981	221,732	251,338

See explanatory information and SOURCE at end of table.

TABLE B-25. State and local government-financed R&D expenditures at doctorate-granting institutions, by geographic division and State: fiscal years 1995--2002

(Dollars in thousands)

Division and State	1995	1996	1997	1998	1999	2000	2001	2002
Mountain	106,101	112,161	115,964	113,153	106,128	115,016	118,230	125,750
Arizona	8,080	8,022	10,266	11,812	11,753	15,221	14,269	14,553
Colorado	22,122	28,049	26,833	25,787	24,672	23,700	21,656	24,123
Idaho	20,671	21,699	21,266	21,760	15,718	18,545	18,389	21,328
Montana	12,914	13,433	14,368	13,784	13,719	16,763	18,298	21,597
Nevada	6,460	3,538	4,411	4,533	5,442	7,032	10,275	5,925
New Mexico	17,298	16,842	14,954	12,555	12,242	11,920	11,860	13,471
Utah	15,431	16,810	17,876	17,556	19,852	20,365	21,445	22,715
Wyoming	3,125	3,768	5,990	5,366	2,730	1,470	2,038	2,038
Pacific	183,572	193,892	213,976	224,882	251,433	310,276	333,846	344,245
Alaska	5,607	5,842	3,964	3,680	3,913	3,267	2,999	3,117
California	107,103	112,962	134,392	141,724	166,656	221,867	239,274	254,315
Hawaii	26,789	31,826	28,440	37,002	35,111	35,474	33,125	29,126
Oregon	30,312	31,906	32,335	29,728	30,534	35,400	41,274	41,610
Washington	13,761	11,356	14,845	12,748	15,219	14,268	17,174	16,077
Outlying areas	18,763	20,873	21,763	22,086	23,933	14,107	2,911	4,263

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-26. Industry-financed R&D expenditures at doctorate-granting institutions, by geographic division and State: fiscal years 1995--2002

(Dollars in thousands)

Division and State	1995	1996	1997	1998	1999	2000	2001	2002
Total	1,456,705	1,571,436	1,702,094	1,855,824	1,996,912	2,117,153	2,177,521	2,150,625
New England	125,519	144,849	146,530	153,393	171,277	184,143	201,648	192,253
Connecticut	20,327	23,378	25,387	25,916	25,904	28,102	24,056	23,205
Maine	4,158	4,214	5,609	7,074	2,324	2,899	3,562	4,030
Massachusetts	89,657	105,800	103,260	106,607	124,097	135,497	153,228	144,934
New Hampshire	3,919	3,886	4,880	6,209	8,939	9,197	12,140	10,389
Rhode Island	1,991	2,340	1,995	2,074	2,901	2,735	2,228	2,538
Vermont	5,467	5,231	5,399	5,513	7,112	5,713	6,434	7,157
Middle Atlantic	240,642	240,952	261,573	275,800	281,351	289,416	319,411	313,661
New Jersey	25,861	23,703	26,186	27,128	30,227	29,633	33,680	32,915
New York	94,708	94,130	96,222	93,508	97,858	101,909	124,671	123,785
Pennsylvania	120,073	123,119	139,165	155,164	153,266	157,874	161,060	156,961
East North Central	200,008	233,197	241,174	262,235	255,978	269,852	270,458	259,551
Illinois	42,519	48,582	48,587	56,246	55,164	54,352	57,894	53,714
Indiana	34,542	35,539	33,321	40,336	41,461	42,009	41,554	43,278
Michigan	51,758	59,031	57,538	59,396	60,998	66,197	64,240	62,785
Ohio	54,316	71,745	82,653	87,999	80,319	87,337	85,868	80,229
Wisconsin	16,873	18,300	19,075	18,258	18,036	19,957	20,902	19,545
West North Central	105,707	102,827	108,381	117,868	130,287	137,981	135,743	133,539
Iowa	19,376	22,269	24,211	30,997	35,706	32,455	34,677	35,322
Kansas	11,434	12,131	11,907	12,104	19,182	23,269	12,318	13,587
Minnesota	23,510	23,809	24,280	24,128	23,953	26,422	26,458	26,577
Missouri	36,639	27,107	30,047	29,589	30,301	33,439	37,863	30,164
Nebraska	10,933	12,268	13,686	16,749	17,231	17,635	17,782	21,104
North Dakota	3,346	4,505	3,439	3,806	3,608	4,400	6,242	6,505
South Dakota	469	738	811	495	306	361	403	280
South Atlantic	305,272	320,043	339,463	382,493	442,383	473,759	498,703	497,390
Delaware	3,681	2,964	3,361	3,859	4,152	3,757	5,041	5,661
District of Columbia	13,297	14,448	18,381	19,481	14,349	16,286	12,789	12,423
Florida	36,382	46,717	55,762	51,668	63,533	78,456	71,466	65,421
Georgia	55,129	63,791	73,284	85,820	89,612	92,212	94,449	94,416
Maryland	55,986	58,767	41,067	41,631	33,641	50,035	71,874	82,214
North Carolina	75,603	87,339	97,719	120,846	179,678	169,860	167,723	155,483
South Carolina	19,364	10,678	8,682	11,400	12,823	15,470	22,989	27,024
Virginia	42,670	31,731	37,488	43,241	39,063	40,173	45,846	47,937
West Virginia	3,160	3,608	3,719	4,547	5,532	7,510	6,526	6,811
East South Central	71,065	77,337	71,065	79,101	75,941	66,369	66,772	58,587
Alabama	29,164	29,706	29,685	30,279	22,287	19,581	21,738	18,856
Kentucky	16,627	19,686	14,781	18,468	21,209	17,745	13,844	8,549
Mississippi	8,929	11,122	9,169	10,399	11,126	10,973	9,714	10,683
Tennessee	16,345	16,823	17,430	19,955	21,319	18,070	21,476	20,499
West South Central	142,533	154,159	188,170	190,853	209,973	215,296	224,054	236,227
Arkansas	7,758	8,272	7,636	8,185	10,236	8,088	7,451	9,073
Louisiana	21,486	23,498	32,737	29,653	25,534	25,680	25,577	30,302
Oklahoma	11,453	11,804	14,036	13,320	14,764	16,754	17,342	19,473
Texas	101,836	110,585	133,761	139,695	159,439	164,774	173,684	177,379

See explanatory information and SOURCE at end of table.

TABLE B-26. Industry-financed R&D expenditures at doctorate-granting institutions, by geographic division and State: fiscal years 1995--2002

(Dollars in thousands)

Division and State	1995	1996	1997	1998	1999	2000	2001	2002
Mountain	86,825	89,540	92,129	99,936	98,679	105,691	109,039	108,445
Arizona	23,238	17,099	18,584	22,125	22,242	28,519	29,924	31,455
Colorado	20,605	23,695	23,756	26,785	27,151	23,819	28,942	33,225
Idaho	8,134	10,333	9,164	8,059	3,962	5,338	6,683	7,469
Montana	5,825	7,000	8,470	8,437	8,326	9,997	8,532	7,413
Nevada	6,941	8,042	5,464	5,355	5,196	5,532	5,078	4,120
New Mexico	10,696	11,840	9,915	12,559	12,866	11,692	12,297	10,936
Utah	9,456	9,445	14,550	13,502	15,730	17,853	15,002	11,246
Wyoming	1,930	2,086	2,226	3,114	3,206	2,941	2,581	2,581
Pacific	177,186	206,238	250,984	288,806	327,662	369,721	349,408	348,081
Alaska	5,470	9,965	12,769	16,081	19,340	19,686	28,352	22,907
California	120,295	140,236	181,742	216,075	236,635	262,228	251,764	253,002
Hawaii	299	8,088	5,944	10,949	13,021	11,158	7,232	9,957
Oregon	11,693	8,620	9,647	4,173	4,189	14,665	14,310	11,712
Washington	39,429	39,329	40,882	41,528	54,477	61,984	47,750	50,503
Outlying areas	1,948	2,294	2,625	5,339	3,381	4,925	2,285	2,891

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-27. Institutionally financed R&D expenditures at doctorate-granting institutions, by geographic division and State: fiscal years 1995--2002

(Dollars in thousands)

Division and State	1995	1996	1997	1998	1999	2000	2001	2002
Total	3,999,814	4,120,101	4,642,917	4,949,214	5,353,032	5,888,941	6,529,015	7,018,787
New England	224,039	257,925	265,293	229,580	222,647	248,625	262,376	267,336
Connecticut	78,243	78,954	76,391	66,868	66,257	73,580	74,450	67,929
Maine	9,357	12,172	10,526	10,810	16,326	19,674	24,631	20,983
Massachusetts	91,647	119,973	125,308	96,413	81,592	91,919	78,317	86,190
New Hampshire	12,948	11,549	15,058	17,439	18,102	22,924	43,031	42,231
Rhode Island	22,325	24,617	26,545	26,130	28,474	30,289	29,609	35,622
Vermont	9,519	10,660	11,465	11,920	11,896	10,239	12,338	14,381
Middle Atlantic	516,150	548,258	570,070	630,904	668,240	728,001	786,016	847,455
New Jersey	133,955	141,839	139,540	150,482	162,464	159,774	172,034	194,923
New York	218,139	238,631	247,965	283,568	318,344	367,657	407,519	447,440
Pennsylvania	164,056	167,788	182,565	196,854	187,432	200,570	206,463	205,092
East North Central	688,718	742,417	783,925	858,096	956,336	1,062,820	1,188,458	1,318,900
Illinois	194,776	211,427	219,390	250,506	270,777	278,482	310,663	344,251
Indiana	101,283	108,023	113,903	126,098	149,140	178,533	203,641	225,268
Michigan	192,755	199,249	209,026	220,734	228,540	251,403	276,818	304,422
Ohio	107,789	130,000	143,733	151,197	148,629	179,333	192,722	228,820
Wisconsin	92,115	93,718	97,873	109,561	159,250	175,069	204,614	216,139
West North Central	342,721	345,537	380,506	391,582	469,139	506,265	593,374	619,312
Iowa	77,262	79,636	83,285	87,842	89,477	102,755	102,193	112,647
Kansas	52,517	52,546	56,752	56,206	58,179	69,864	74,129	91,379
Minnesota	46,255	46,759	53,751	55,541	61,591	70,348	79,800	74,285
Missouri	92,974	91,496	108,016	108,237	126,987	129,688	163,412	160,592
Nebraska	46,329	44,096	50,105	55,018	102,726	101,134	127,800	129,763
North Dakota	25,043	27,980	25,554	26,091	27,782	28,651	42,409	46,964
South Dakota	2,341	3,024	3,043	2,647	2,397	3,825	3,631	3,682
South Atlantic	741,814	722,874	882,393	900,508	993,356	1,102,815	1,239,514	1,368,213
Delaware	14,560	13,074	20,125	19,222	19,401	19,430	16,464	18,239
District of Columbia	19,937	21,321	24,092	25,865	12,398	15,088	3,822	9,296
Florida	180,109	160,422	181,848	183,378	197,382	219,176	290,399	275,420
Georgia	227,244	223,909	252,398	246,047	258,131	298,827	296,816	312,498
Maryland	103,679	112,671	132,608	142,660	150,988	180,970	210,915	237,718
North Carolina	64,290	66,522	108,200	96,101	144,854	147,496	152,490	230,160
South Carolina	53,994	48,596	65,914	84,576	100,824	100,941	130,480	143,695
Virginia	64,531	61,909	74,018	76,562	85,076	97,093	108,940	112,835
West Virginia	13,470	14,450	23,190	26,097	24,302	23,794	29,188	28,352
East South Central	180,071	188,310	204,284	249,450	280,589	321,013	291,952	317,794
Alabama	79,861	77,312	84,747	82,108	78,983	87,899	86,260	91,665
Kentucky	43,883	49,194	53,070	83,214	106,967	119,395	99,551	96,816
Mississippi	11,211	11,600	13,623	30,603	35,696	46,603	50,627	52,804
Tennessee	45,116	50,204	52,844	53,525	58,943	67,116	55,514	76,509
West South Central	465,220	416,102	428,907	452,965	484,724	526,390	581,478	629,593
Arkansas	19,987	21,459	24,261	25,542	14,856	20,633	21,861	18,855
Louisiana	71,436	71,771	80,368	80,576	96,134	100,809	105,450	108,026
Oklahoma	79,107	72,669	52,462	59,439	76,192	87,952	88,019	93,459
Texas	294,690	250,203	271,816	287,408	297,542	316,996	366,148	409,253

See explanatory information and SOURCE at end of table.

TABLE B-27. Institutionally financed R&D expenditures at doctorate-granting institutions, by geographic division and State: fiscal years 1995--2002

(Dollars in thousands)

Division and State	1995	1996	1997	1998	1999	2000	2001	2002
Mountain	317,767	335,019	355,511	378,350	374,216	379,458	423,016	439,651
Arizona	126,380	137,834	137,165	146,586	150,366	158,810	169,472	171,237
Colorado	52,080	50,995	50,422	68,065	59,833	52,784	56,152	58,756
Idaho	10,256	15,143	14,930	16,334	16,877	17,505	21,948	21,077
Montana	20,172	21,133	15,684	13,435	15,528	15,658	20,919	24,212
Nevada	24,798	25,924	30,749	24,314	25,484	29,040	27,681	28,370
New Mexico	38,562	39,092	42,442	45,780	39,260	41,740	55,841	64,449
Utah	28,065	26,618	40,376	42,561	46,220	43,818	54,787	55,334
Wyoming	17,454	18,280	23,743	21,275	20,648	20,103	16,216	16,216
Pacific	514,894	556,974	764,858	844,961	892,208	1,001,440	1,150,304	1,197,019
Alaska	23,850	25,217	26,082	24,340	30,908	32,937	23,557	24,086
California	372,641	410,029	620,222	694,972	723,298	817,612	945,782	1,021,318
Hawaii	3,738	4,386	13,297	13,170	15,260	19,249	18,903	11,858
Oregon	37,453	40,769	35,824	37,747	45,670	32,239	35,283	35,924
Washington	77,212	76,573	69,433	74,732	77,072	99,403	126,779	103,833
Outlying areas	8,420	6,685	7,170	12,818	11,577	12,114	12,527	13,514

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-28. All other sources of financed R&D expenditures at doctorate-granting institutions, by geographic division and State: fiscal years 1995--2002

(Dollars in thousands)

Division and State	1995	1996	1997	1998	1999	2000	2001	2002
Total	1,592,738	1,595,094	1,685,587	1,828,479	1,957,558	2,210,682	2,383,368	2,651,661
New England	176,843	146,967	152,151	171,787	197,622	212,342	237,899	250,448
Connecticut	32,008	31,931	34,775	34,801	39,399	44,868	54,327	61,151
Maine	592	493	392	398	2,250	1,964	4,118	3,038
Massachusetts	126,713	95,782	95,893	112,707	132,433	143,771	157,300	155,589
New Hampshire	12,112	12,908	12,295	14,409	13,806	13,824	14,543	21,487
Rhode Island	1,725	2,130	2,859	3,181	3,496	3,599	3,648	4,758
Vermont	3,693	3,723	5,937	6,291	6,238	4,316	3,963	4,425
Middle Atlantic	311,472	298,514	315,035	338,338	348,829	412,218	435,810	464,216
New Jersey	33,434	29,016	34,968	39,171	43,194	73,704	80,505	74,301
New York	212,504	202,697	210,315	230,997	220,953	229,910	236,612	267,029
Pennsylvania	65,534	66,801	69,752	68,170	84,682	108,604	118,693	122,886
East North Central	250,848	258,657	272,240	276,472	280,113	306,065	333,864	389,807
Illinois	64,082	62,603	75,453	79,767	82,245	80,293	85,050	96,699
Indiana	19,521	19,798	20,122	19,483	17,452	20,438	28,685	44,022
Michigan	57,594	76,555	71,879	68,734	62,507	69,744	74,448	91,839
Ohio	58,828	46,249	49,219	49,335	57,724	68,276	74,915	84,917
Wisconsin	50,823	53,452	55,567	59,153	60,185	67,314	70,766	72,330
West North Central	85,170	90,793	99,400	115,326	122,718	143,017	137,066	137,479
Iowa	14,510	18,547	18,746	18,196	13,686	21,416	22,197	22,481
Kansas	8,166	7,819	8,809	16,000	16,592	14,848	21,357	15,474
Minnesota	22,544	23,990	34,525	28,943	29,056	32,395	33,531	37,480
Missouri	33,343	32,323	28,801	42,259	45,173	52,178	41,288	38,413
Nebraska	3,567	4,460	5,209	5,253	13,532	16,686	12,457	16,761
North Dakota	1,853	2,150	1,826	2,734	2,417	2,595	3,533	3,622
South Dakota	1,187	1,504	1,484	1,941	2,262	2,899	2,703	3,248
South Atlantic	200,307	212,868	241,186	245,351	243,136	292,951	308,912	349,332
Delaware	5,424	6,197	6,601	8,527	10,030	9,776	9,687	9,141
District of Columbia	14,643	17,018	16,433	18,999	19,342	23,316	15,457	19,190
Florida	29,065	32,174	33,957	39,805	38,861	40,206	47,286	64,099
Georgia	24,726	26,857	24,413	30,080	36,279	38,673	43,502	53,956
Maryland	52,549	56,178	79,984	68,519	67,970	103,630	105,898	96,486
North Carolina	22,144	31,421	29,983	35,382	26,979	30,712	39,076	47,613
South Carolina	19,388	17,705	20,820	10,572	14,204	12,022	6,473	17,082
Virginia	28,086	21,493	24,302	29,542	25,227	29,965	36,425	41,340
West Virginia	4,282	3,825	4,693	3,925	4,244	4,651	5,108	425
East South Central	52,207	48,036	58,172	68,449	85,574	95,047	79,306	77,852
Alabama	21,540	15,634	18,025	29,858	42,073	36,184	18,583	17,614
Kentucky	4,874	3,273	7,292	8,743	8,748	16,924	20,686	29,654
Mississippi	6,291	10,283	10,135	1,931	2,452	3,065	4,134	4,593
Tennessee	19,502	18,846	22,720	27,917	32,301	38,874	35,903	25,991
West South Central	208,386	228,069	203,532	220,230	252,837	271,047	301,621	339,497
Arkansas	3,262	5,285	6,401	7,154	7,120	7,259	8,901	7,647
Louisiana	19,497	17,841	16,929	19,563	19,910	32,312	39,284	45,627
Oklahoma	16,608	13,864	13,161	14,773	16,674	11,637	12,652	15,973
Texas	169,019	191,079	167,041	178,740	209,133	219,839	240,784	270,250

See explanatory information and SOURCE at end of table.

TABLE B-28. All other sources of financed R&D expenditures at doctorate-granting institutions, by geographic division and State: fiscal years 1995--2002

(Dollars in thousands)

Division and State	1995	1996	1997	1998	1999	2000	2001	2002
Mountain	69,149	67,013	70,404	73,017	81,323	86,255	95,263	102,092
Arizona	12,043	13,037	12,706	15,306	15,783	18,289	21,167	26,809
Colorado	35,456	33,598	36,910	35,270	32,966	14,678	25,222	25,417
Idaho	1,538	447	452	798	7,001	3,450	1,129	1,073
Montana	586	694	808	1,039	1,416	3,554	1,328	1,758
Nevada	995	753	3,773	4,190	3,976	4,545	3,815	3,213
New Mexico	7,283	8,310	7,200	5,266	4,850	5,792	8,092	7,699
Utah	8,660	8,746	7,764	10,209	13,827	33,923	33,730	35,343
Wyoming	2,588	1,428	791	939	1,504	2,024	780	780
Pacific	237,204	243,520	271,626	317,435	344,564	391,160	452,503	539,331
Alaska	4	6	1	0	17	5	0	0
California	197,553	206,963	237,168	272,276	307,917	354,590	412,074	491,802
Hawaii	3,365	0	5	0	0	0	0	0
Oregon	21,041	20,198	17,767	27,355	16,518	16,145	18,332	21,619
Washington	15,241	16,353	16,685	17,804	20,112	20,420	22,097	25,910
Outlying areas	1,152	657	1,841	2,074	842	580	1,124	1,607

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-29. R&D expenditures at universities and colleges, by State, control, and source of funds: fiscal year 2002

(Dollars in thousands)

State, control, and institution	Total	Federal Government	State and local governments	Industry	Institu-tional funds	All other sources
United States, total	36,332,641	21,833,953	2,500,649	2,188,111	7,108,773	2,701,155
Public, total	24,830,706	13,367,288	2,249,577	1,461,887	5,994,753	1,757,201
Private, total	11,501,935	8,466,665	251,072	726,224	1,114,020	943,954
Alabama, total	503,470	365,187	7,582	18,856	91,942	19,903
Public, total	484,153	349,094	6,740	18,856	91,849	17,614
AL A&M U.	15,717	10,710	2,465	722	1,820	0
AL State U.	1,433	1,249	0	0	184	0
Auburn U. all campuses	108,775	42,432	1,350	4,178	56,756	4,059
U. AL Birmingham, The	255,053	216,221	102	8,368	16,807	13,555
U. AL Huntsville, The	48,353	35,660	123	2,179	10,391	0
U. AL, The	37,130	26,900	2,115	2,224	5,891	0
U. South AL	17,692	15,922	585	1,185	0	0
Private, total	19,317	16,093	842	0	93	2,289
Miles C.	8,785	7,943	842	0	0	0
Oakwood C.	567 i	447 i	0 i	0 i	93 i	27 i
Selma U.	0	0	0	0	0	0
Talladega C.	0	0	0	0	0	0
Tuskegee U.	9,965	7,703	0	0	0	2,262
Alaska, total	128,875	71,129	3,758	24,002	28,132	1,854
Public, total	128,832	71,086	3,758	24,002	28,132	1,854
U. AK Anchorage all campuses	11,685e	4,244e	550 i	1,076 i	3,968 i	1,847 i
U. AK Fairbanks all campuses	116,279	66,169	3,117	22,907	24,086	0
U. AK Southeast	868e	673e	91 i	19 i	78 i	7 i
Private, total	43	43	0	0	0	0
AK Pacific U.	43	43	0	0	0	0
Arizona, total	531,106	287,052	14,553	31,455	171,237	26,809
Public, total	531,106	287,052	14,553	31,455	171,237	26,809
AZ State U. main campus	123,016	64,407	2,955	7,095	44,303	4,256
Northern AZ U.	17,263	10,873	3,497	1,256	1,497	140
U. AZ	390,827	211,772	8,101	23,104	125,437	22,413
Arkansas, total	140,283	61,765	40,705	9,106	21,057	7,650
Public, total	140,283	61,765	40,705	9,106	21,057	7,650
AR State U. main campus	1,278	312	808	0	158	0
AR Tech U.	526e	130e	80e	33e	283e	0e
U. AR Little Rock	2,088e	2,088e	0e	0e	0e	0e
U. AR Pine Bluff	5,976	3,016	1,038	0	1,919	3
U. AR for Medical Sciences	45,046	27,491	3,844	2,676	6,314	4,721
U. AR main campus	83,063	27,588	34,668	6,370	11,977	2,460
U. Central AR	2,306	1,140	267	27	406	466
Private, total	0	0	0	0	0	0
Philander Smith C.	0	0	0	0	0	0
California, total	4,881,791	2,801,529	283,650	263,395	1,029,639	503,578
Public, total	3,650,974	1,838,105	254,402	182,177	916,938	459,352
CA State Polytechnic U. Pomona	2,806	2,806	0	0	0	0
CA State Polytechnic U. San Luis Obispo	14,002	5,968	4,979	919	907	1,229
CA State U. Bakersfield	4,199 i	523 i	904 i	452 i	638 i	1,682 i
CA State U. Chico	5,486	617	3,122	1,747	0	0

See explanatory information and SOURCE at end of table.

TABLE B-29. R&D expenditures at universities and colleges, by State, control, and source of funds: fiscal year 2002

(Dollars in thousands)

State, control, and institution	Total	Federal Government	State and local governments	Industry	Institu-tional funds	All other sources
California, continued:						
Public, continued:						
CA State U. Dominguez Hills	3,970	2,783	1,148	4	0	35
CA State U. Fresno	9,398	1,392	7,212	294	500	0
CA State U. Fullerton	9,282	4,434	1,030 i	689 i	1,207 i	1,922 i
CA State U. Hayward	2,455	1,930	148	53	220	104
CA State U. Long Beach	8,026	4,944	1,842	140	577	523
CA State U. Los Angeles	7,933	7,728	6	199	0	0
CA State U. Monterey Bay	1,911 e	1,285 e	550 e	0 e	0 e	76 e
CA State U. Northridge	10,619	6,786	2,023	24	1,441	345
CA State U. San Bernardino	3,740	1,399	1,325	165	851	0
Humboldt State U.	7,123 i	3,354 i	1,092 i	1,119 i	577 i	981 i
Naval Postgraduate School	45,227 i	44,379 i	282 i	380 i	0 i	186 i
San Diego State U.	64,302	25,223	8,716	1,059	23,221	6,083
San Francisco State U.	14	13	0 i	1 i	0 i	0 i
San Jose State U.	25,003	15,777	5,448	2,432	1,020	326
Sonoma State U.	341	161	99	0	25	56
U. CA Berkeley	474,746	217,297	35,501	24,999	132,412	64,537
U. CA Davis	456,653	176,644	45,075	20,754	170,742	43,438
U. CA Irvine	209,469	115,548	10,407	14,261	40,677	28,576
U. CA Los Angeles	787,598	366,762	65,614	31,686	209,948	113,588
U. CA Riverside	111,936	32,305	7,307	3,358	57,000	11,966
U. CA San Diego	585,008	359,383	21,931	32,299	106,112	65,283
U. CA San Francisco	596,965	327,393	24,316	33,577	117,848	93,831
U. CA Santa Barbara	131,795	78,370	3,193	10,482	24,491	15,259
U. CA Santa Cruz	70,967	32,901	1,132	1,084	26,524	9,326
Private, total	1,230,817	963,424	29,248	81,218	112,701	44,226
Alliant International U.	368	214	0	0	154	0
Azusa Pacific U.	0	0	0	0	0	0
Biola U.	0	0	0	0	0	0
CA Institute of Integral Studies	0	0	0	0	0	0
CA Institute of Technology	220,004	199,944	534	9,989	9,537	0
Chapman U.	1,068	442	0	0	341	285
Charles R. Drew U. of Medicine & Science	48,839	39,259	6,629	2,941	10	0
Claremont Graduate U.	1,949	621	306	47	260	715
Golden Gate U.	0	0	0	0	0	0
Harvey Mudd C.	7,306 i	1,316 i	105 i	520 i	641 i	4,724 i
Loma Linda U.	23,996	20,114	466	746	796	1,874
Occidental C.	2,503	1,303	144	930	126	0
Pepperdine U.	0	0	0	0	0	0
Pitzer C.	287	227	0	0	59	1
Point Loma Nazarene C.	102	53	0	0	0	49
Pomona C.	2,063	917	0	845	109	192
Santa Clara U.	3,024 i	706 i	0 i	750 i	1,484 i	84 i
Stanford U.	538,474	426,620	5,479	39,110	32,629	34,636
U. Redlands	2,728	2,674	0	0	0	54
U. San Diego	2,686	1,425	3	88	0	1,170
U. Southern CA	372,397	266,645	15,278	24,321	66,153	0
U. of the Pacific	1,891	730	304	857	0	0
Western U. of Health Sciences	1,132	214	0	74	402	442

See explanatory information and SOURCE at end of table.

TABLE B-29. R&D expenditures at universities and colleges, by State, control, and source of funds: fiscal year 2002

(Dollars in thousands)

State, control, and institution	Total	Federal Government	State and local governments	Industry	Institu-tional funds	All other sources
Colorado, total	645,291	484,762	24,385	33,640	77,073	25,431
Public, total	633,347	476,128	23,882	33,048	75,538	24,751
CO School of Mines	26,515	13,230	1,964	11,001	320	0
CO State U.	178,845	112,650	18,584	10,034	30,334	7,243
Ft. Lewis C.	286	221	13	52	0	0
U.S. Air Force Academy	25,589	8,163	0	86	17,340	0
U. CO Boulder	201,222	178,027	1,460	3,454	12,980	5,301
U. CO Colorado Springs	2,248	1,081	215	556	357	39
U. CO Denver	2,902	2,084	605	41	0	172
U. CO Health Sciences Ctr.	193,446	159,274	711	7,771	13,874	11,816
U. Northern CO	1,376	840	81	20	255	180
U. Southern CO	597	541	8	33	15	0
Western State C. CO	321	17	241	0	63	0
Private, total	11,944	8,634	503	592	1,535	680
CO C.	1,286	143	0	244	899	0
Regis U.	119	105	0	0	0	14
U. Denver	10,539	8,386	503	348	636	666
Connecticut, total	538,070	375,054	8,969	23,332	68,711	62,004
Public, total	173,775	94,700	7,763	9,914	44,413	16,985
Central CT State U.	283	102	56	0	123	2
Southern CT State U.	361	144	104	25	88	0
U.S. Coast Guard Academy	1,128	1,128	0	0	0	0
U. CT all campuses	172,003	93,326	7,603	9,889	44,202	16,983
Private, total	364,295	280,354	1,206	13,418	24,298	45,019
CT C.	542 i	0 i	1 i	11 i	18 i	512 i
Fairfield U.	810	106	4	20	458	222
Trinity C. (Hartford, CT)	464	181	0	71	95	117
U. Hartford	1,130	537	148	280	162	3
U. New Haven	1,492e	1,492e	0e	0e	0e	0e
Wesleyan U.	5,614	3,734	11	11	1,231	627
Yale U.	354,243	274,304	1,042	13,025	22,334	43,538
Delaware, total	88,319	51,002	4,270	5,667	18,239	9,141
Public, total	88,319	51,002	4,270	5,667	18,239	9,141
DE State U.	3,162	2,819	337	6	0	0
U. DE	85,157	48,183	3,933	5,661	18,239	9,141
District of Columbia, total	251,601	206,000	4,166	12,423	9,777	19,235
Public, total	4,223	2,963	734	0	481	45
U. DC	4,223	2,963	734	0	481	45
Private, total	247,378	203,037	3,432	12,423	9,296	19,190
American U.	4,420	3,467	20	56	141	736
Catholic U. America	22,883	17,925	54	182	3,928	794
Gallaudet U.	1,950	1,880	70	0	0	0
George Washington U.	86,288	58,729	2,392	6,456	1,298	17,413
Georgetown U.	96,450	87,087	857	4,330	3,929	247
Howard U.	35,387	33,949	39	1,399	0	0
Florida, total	1,085,764	559,327	118,480	67,194	276,617	64,146
Public, total	898,553	427,583	112,116	47,692	267,899	43,263
FL A&M U.	31,147	21,592	6,335	3,220	0	0
FL Atlantic U.	23,995	15,566	2,023	6,406	0	0
FL International U.	47,654	32,057	7,630	3,131	557	4,279
FL State U.	134,351	70,456	8,456	1,176	49,541	4,722

See explanatory information and SOURCE at end of table.

TABLE B-29. R&D expenditures at universities and colleges, by State, control, and source of funds: fiscal year 2002

(Dollars in thousands)

State, control, and institution	Total	Federal Government	State and local governments	Industry	Institu-tional funds	All other sources
Florida, continued:						
Public, continued:						
New C. FL	132	55	7	0	51	19
U. Central FL	66,351	29,929	4,007	5,499	26,916	0
U. FL	386,316	167,108	71,547	19,017	113,585	15,059
U. North FL	2,061	1,397	240	400	24	0
U. South FL	197,894	84,108	10,179	8,215	76,208	19,184
U. West FL	8,652	5,315	1,692	628	1,017	0
Private, total	187,211	131,744	6,364	19,502	8,718	20,883
Bethune Cookman C.	794	794	0	0	0	0
Embry-Riddle Aeronautical U.	5,102	4,174	50	745	105	28
FL Institute of Technology	6,669	3,646	717	1,495	778	33
Nova Southeastern U.	3,327	1,959	608	0	89	671
U. Miami	171,319	121,171	4,989	17,262	7,746	20,151
Georgia, total	1,076,424	534,419	79,163	95,964	312,922	53,956
Public, total	730,831	294,384	74,586	75,653	280,531	5,677
Albany State U.	1,987	1,640	73	274	0	0
Ft. Valley State U.	2,985	2,985	0	0	0	0
GA Institute of Technology all campuses	340,347	165,680	10,229	55,802	108,636	0
GA Southern U.	1,127	882	0	245	0	0
GA State U.	44,564	18,967	7,341	988	14,596	2,672
Kennesaw State U.	221	221	0	0	0	0
Medical C. GA	51,705	23,317	1,616	2,793	21,944	2,035
Savannah State U.	2,206	2,206	0	0	0	0
State U. West GA	1,029	400	300	164	165	0
U. GA	284,660	78,086	55,027	15,387	135,190	970
Private, total	345,593	240,035	4,577	20,311	32,391	48,279
Clark Atlanta U.	17,194	15,325	39	0	898	932
Emory U.	271,238	186,083	3,588	9,282	25,373	46,912
Institute of Paper Science and Technology	13,929e	2,947e	827e	6,828e	2,892e	435e
Mercer U. all campuses	12,998	8,607	99	1,986	2,306	0
Morehouse C.	2,853 i	1,843 i	0 i	826 i	184 i	0 i
Morehouse School of Medicine	23,956	21,919	24	1,350	663	0
Morris Brown C.	343	343	0	0	0	0
Spelman C.	3,082	2,968	0	39	75	0
Hawaii, total	172,664	119,381	31,062	9,971	12,232	18
Public, total	172,664	119,381	31,062	9,971	12,232	18
U. HI Hilo	10,841	8,499	1,936	14	374	18
U. HI Manoa	161,823	110,882	29,126	9,957	11,858	0
Idaho, total	93,323	42,376	21,328	7,469	21,077	1,073
Public, total	93,323	42,376	21,328	7,469	21,077	1,073
Boise State U.	6,446	4,173	493	1,106	674	0
ID State U.	10,119	4,738	200	2,554	2,627	0
U. ID	76,758	33,465	20,635	3,809	17,776	1,073
Illinois, total	1,440,538	838,614	92,536	54,932	357,294	97,162
Public, total	779,766	382,727	79,056	28,066	247,932	41,985
Chicago State U.	1,297	1,236	0	0	61	0
IL State U.	3,848	1,574	1,032	564	678	0
Northeastern IL U.	216	47	15	55	70	29
Northern IL U.	10,366	4,980	322	1,550	3,514	0
Southern IL U. Carbondale	53,604	10,789	12,516	4,108	21,890	4,301

See explanatory information and SOURCE at end of table.

TABLE B-29. R&D expenditures at universities and colleges, by State, control, and source of funds: fiscal year 2002

(Dollars in thousands)

State, control, and institution	Total	Federal Government	State and local governments	Industry	Institu-tional funds	All other sources
Illinois, continued:						
Public, continued:						
Southern IL U. Edwardsville	14,043	1,413	395	472	11,655	108
U. IL Chicago	259,852	143,183	9,812	9,325	76,958	20,574
U. IL Springfield	2,324	200	725	0	1,190	209
U. IL Urbana-Champaign	427,174	214,323	53,173	11,796	131,437	16,445
Western IL U.	7,042	4,982	1,066	196	479	319
Private, total	660,772	455,887	13,480	26,866	109,362	55,177
Bradley U.	1,928	953	27	495	453	0
Depaul U.	2,389	1,971	0	388	30	0
Finch U. of Health Sciences/Chicago Medical School	8,645	5,638	0	25	2,252	730
IL Institute of Technology	19,909	11,277	4,303	0	1,187	3,142
Knox C.	60	60	0	0	0	0
Lake Forest C.	283	126	0	0	157	0
Loyola U. (Chicago, IL)	37,607	27,678	867	1,075	4,147	3,840
Midwestern U.	2,562	589	0	276	1,399	298
National U. of Health Sciences	577	402	0	0	168	7
Northwestern U.	282,154	178,607	3,107	12,214	64,266	23,960
Rush U.	79,394	44,756	37	10,108	21,565	2,928
U. Chicago	225,264	183,830	5,139	2,285	13,738	20,272
Indiana, total	650,718	276,401	54,494	43,339	225,350	51,134
Public, total	590,086	242,110	51,142	36,202	216,610	44,022
Ball State U.	4,008	1,590	314	489	1,567	48
IN State U. all campuses	1,220	284	149	787	0	0
IN U. all campuses	299,080	132,759	5,636	5,312	111,502	43,871
Purdue U. all campuses	285,778	107,477	45,043	29,614	103,541	103
Private, total	60,632	34,291	3,352	7,137	8,740	7,112
Rose-Hulman Institute of Technology	7,912	744	0	56	0	7,112
U. of Notre Dame	52,371	33,285	3,352	7,076	8,658	0
Valparaiso U.	349	262	0	5	82	0
Iowa, total	485,756	257,084	56,410	35,462	114,077	22,723
Public, total	479,726	253,225	56,397	35,223	112,362	22,519
IA State U.	188,664	71,419	48,427	16,047	49,753	3,018
U. IA	288,808	180,743	7,523	19,169	61,941	19,432
U. Northern IA	2,254	1,063	447	7	668	69
Private, total	6,030	3,859	13	239	1,715	204
Des Moines U. Osteopathic Medical Ctr.	767e	164e	7e	106e	490e	0e
Drake U.	1,053	692	6	133	95	127
Grinnell C.	1,098	385	0	0	667	46
Maharishi U. of Management	3,112	2,618	0	0	463	31
Kansas, total	299,728	134,301	44,698	13,741	91,401	15,587
Public, total	299,728	134,301	44,698	13,741	91,401	15,587
KS State U.	106,804	43,988	35,903	5,659	18,032	3,222
Pittsburg State U.	1,951	963	699	154	22	113
U. KS all campuses	172,131	82,663	6,939	5,098	65,338	12,093
Wichita State U.	18,842	6,687	1,157	2,830	8,009	159

See explanatory information and SOURCE at end of table.

TABLE B-29. R&D expenditures at universities and colleges, by State, control, and source of funds: fiscal year 2002

(Dollars in thousands)

State, control, and institution	Total	Federal Government	State and local governments	Industry	Institu-tional funds	All other sources
Kentucky, total	332,853	150,282	45,126	9,084	98,669	29,692
Public, total	331,665	149,923	45,126	9,084	98,669	28,863
Eastern KY U.	666	225	91	60	290	0
KY State U.	6,188	6,036	113	14	0	25
Murray State U.	2,112	739	534	34	805	0
Northern KY U.	169	26	0	9	121	13
U. KY all campuses	236,275	100,426	40,041	7,810	73,834	14,164
U. Louisville	80,974	38,978	3,614	739	22,982	14,661
Western KY U.	5,281	3,493	733	418	637	0
Private, total	1,188	359	0	0	0	829
Spalding U.	1,188	359	0	0	0	829
Louisiana, total	482,785	200,891	96,998	30,503	108,677	45,716
Public, total	372,846	129,655	91,046	16,905	93,963	41,277
Grambling State U.	2,452	1,977	475	0	0	0
LA State U. Health Sciences Ctr.	64,167	30,697	6,553	3,910	14,459	8,548
LA State U. Shreveport	128	55	20	13	0	40
LA State U. and Agricultural and Mechanical C.	198,006	52,789	69,924	8,326	54,658	12,309
LA Tech U.	12,110	3,487	1,058	196	7,177	192
McNeese State U.	709	409	55	0	231	14
Nicholls State U.	820	59	333	142	286	0
Southeastern LA U.	836	525	146	46	119	0
Southern U. A&M C. all campuses	10,012 i	7,903 i	280 i	127 i	1,702 i	0 i
Southern U. New Orleans	937	902	0	0	0	35
U. LA Lafayette	47,796	12,925	5,999	0	9,827	19,045
U. LA Monroe, The	9,811 i	3,540 i	1,637 i	0 i	4,634 i	0 i
U. New Orleans	25,062	14,387	4,566	4,145	870	1,094
Private, total	109,939	71,236	5,952	13,598	14,714	4,439
Dillard U.	528	393	120	0	15	0
Tulane U.	102,998	64,824	5,812	13,555	14,368	4,439
Xavier U. LA	6,413	6,019	20	43	331	0
Maine, total	69,222	25,830	11,151	4,075	22,182	5,984
Public, total	63,900	23,889	11,103	4,030	21,719	3,159
U. ME	62,149	23,732	10,366	4,030	20,983	3,038
U. Southern ME	1,751 i	157 i	737 i	0 i	736 i	121 i
Private, total	5,322	1,941	48	45	463	2,825
Bates C.	1,217	977	48	4	64	124
Bowdoin C.	1,176	658	0	41	169	308
Colby C.	2,929	306	0	0	230	2,393
Maryland, total	1,880,122	1,405,242	58,320	82,214	237,730	96,616
Public, total	738,747	381,962	55,708	61,905	186,651	52,521
Bowie State U.	2,330	2,200	0	0	0	130
Coppin State C.	0	0	0	0	0	0
Morgan State U.	1,674	1,674	0	0	0	0
St. Mary's C. MD	274	262	0	0	12	0
Towson U.	2,449	1,037	591	28	793	0
Uniformed Services U. of the Health Sciences	28,630	10,294	0	0	18,336	0
U.S. Naval Academy	2,324	2,324	0	0	0	0
U. MD Baltimore	266,822	117,017	27,202	51,562	36,105	34,936
U. MD Baltimore County	36,323	29,376	936	1,970	2,387	1,654

See explanatory information and SOURCE at end of table.

TABLE B-29. R&D expenditures at universities and colleges, by State, control, and source of funds: fiscal year 2002

(Dollars in thousands)

State, control, and institution	Total	Federal Government	State and local governments	Industry	Institu-tional funds	All other sources
Maryland, continued:						
Public, continued:						
U. MD Biotechnology Institute	34,440	10,603	1,956	3,167	15,726	2,988
U. MD Ctr. for Environmental Science	38,501	13,080	4,664	100	16,359	4,298
U. MD College Park	324,980	194,095	20,359	5,078	96,933	8,515
U. MD Eastern Shore	0	0	0	0	0	0
Private, total	1,141,375	1,023,280	2,612	20,309	51,079	44,095
Johns Hopkins U., The	1,140,235	1,022,510	2,612	20,282	50,736	44,095
Loyola C.	1,140	770	0	27	343	0
Massachusetts, total	1,705,807	1,261,765	46,514	147,865	89,124	160,539
Public, total	293,512	175,869	38,197	16,173	43,949	19,324
Bridgewater State C.	473	196	31	67	105	74
U. MA Amherst	109,332	54,770	4,185	5,417	35,959	9,001
U. MA Boston	13,121	4,837	1,112	0	4,494	2,678
U. MA Dartmouth	15,030	7,142	4,124	2,120	1,644	0
U. MA Lowell	22,827	14,932	854	5,294	1,747	0
U. MA Worcester	132,729	93,992	27,891	3,275	0	7,571
Private, total	1,412,295	1,085,896	8,317	131,692	45,175	141,215
Amherst C.	2,115	955	0	147	1,013	0
Boston C.	31,754	22,827	346	2,479	3,842	2,260
Boston U.	192,612	171,438	650	8,935	0	11,589
Brandeis U.	47,122	29,006	118	0	7,397	10,601
Clark U.	3,418	3,418	0	0	0	0
C. of the Holy Cross	532	329	0	44	35	124
Hampshire C.	3,224	1,095	109	27	117	1,876
Harvard U.	401,367	336,607	2,192	10,215	0	52,353
MA C. of Pharmacy & Health Sciences	392	77	0	0	0	315
MA Institute of Technology	455,491	330,409	150	88,626	7,301	29,005
Mt. Holyoke C.	2,644	1,449	50	0	198	947
New England C. of Optometry	2,154	1,792	0	20	277	65
Northeastern U.	38,540	24,295	884	7,487	5,874	0
Simmons C.	872	118	2	636	116	0
Smith C.	1,827	515	9	1,303	0	0
Tufts U.	109,291	73,236	2,312	8,888	13,073	11,782
Wellesley C.	5,498e	3,446e	0e	188e	0e	1,864e
Wentworth Institute of Technology	24	24	0	0	0	0
Williams C.	2,961	1,389	0	499	1,073	0
Woods Hole Oceanographic Institution	99,964	78,458	1,460	32	2,943	17,071
Worcester Polytechnic Institute	10,493	5,013	35	2,166	1,916	1,363
Michigan, total	1,233,076	699,669	69,484	63,724	307,237	92,962
Public, total	1,226,860	697,157	69,163	62,586	305,805	92,149
Central MI U.	2,252	190	35	105	1,922	0
Eastern MI U.	3,164	777	372	441	1,210	364
Ferris State U.	64e	62e	0e	2e	0e	0e
Grand Valley State U.	2,374	405	36	0	1,406	527
MI State U.	289,787	122,595	48,810	11,458	95,848	11,076
MI Technological U.	30,005	17,973	1,511	2,899	7,210	412
Oakland U.	6,869	4,903	151	1,731	0	84
Saginaw Valley State U.	591	174	5	5	264	143
U. MI all campuses	673,724	444,255	5,298	33,252	135,634	55,285
Wayne State U.	199,007	95,910	12,547	11,163	57,388	21,999
Western MI U.	19,023	9,913	398	1,530	4,923	2,259

See explanatory information and SOURCE at end of table.

TABLE B-29. R&D expenditures at universities and colleges, by State, control, and source of funds: fiscal year 2002

(Dollars in thousands)

State, control, and institution	Total	Federal Government	State and local governments	Industry	Institu-tional funds	All other sources
Michigan, continued:						
Private, total	6,216	2,512	321	1,138	1,432	813
Andrews U.	597	123	0	9	135	330
Calvin C.	1,509	338	33	320	818	0
Hope C.	1,514	853	0	0	208	453
Kettering U.	1,311	638	67	501	105	0
Lawrence Technological U.	539	191	221	113	14	0
U. Detroit Mercy	746	369	0	195	152	30
Minnesota, total	504,257	300,256	61,350	27,157	77,274	38,220
Public, total	497,800	296,742	61,321	27,108	74,870	37,759
MN State U. Mankato	1,054	181	394	247	166	66
St. Cloud State U.	2,481 i	1,260 i	222 i	289 i	493 i	217 i
U. MN all campuses	494,265	295,301	60,705	26,572	74,211	37,476
Private, total	6,457	3,514	29	49	2,404	461
Augsburg C.	655	655	0	0	0	0
Carleton C.	1,688	959	0	44	508	177
Macalester C.	3,024	1,057	25	0	1,822	120
St. Olaf C.	847	683	4	0	0	160
U. of St. Thomas (St. Paul, MN)	243	160	0	5	74	4
Mississippi, total	285,466	178,978	37,808	10,683	53,404	4,593
Public, total	284,459	178,571	37,808	10,683	52,804	4,593
Alcorn State U.	5,809	5,809	0	0	0	0
Jackson State U.	25,445	21,721	0	0	3,724	0
MS State U.	158,652	77,521	31,720	6,366	43,045	0
MS Valley State U.	1,030	1,030	0	0	0	0
U. MS all campuses	67,838 i	50,092 i	5,235 i	2,412 i	5,506 i	4,593 i
U. Southern MS	25,685	22,398	853	1,905	529	0
Private, total	1,007	407	0	0	600	0
Rust C.	0	0	0	0	0	0
Tougaloo C.	1,007 i	407 i	0 i	0 i	600 i	0 i
Missouri, total	705,593	447,795	27,322	30,459	161,444	38,573
Public, total	250,619	111,731	19,387	11,196	100,392	7,913
Lincoln U. (Jefferson City, MO)	3,291	2,513	778	0	0	0
Southeast MO State U.	141	30	31	29	51	0
Southwest MO State U.	1,888	79	1,000	260	395	154
Truman State U.	487	68	1 i	6 i	406 i	6 i
U. MO system administration	0	0	0	0	0	0
U. MO-Columbia	177,011	77,742	17,048	5,042	71,132	6,047
U. MO-Kansas City	24,060	10,795	210	1,371	10,784	900
U. MO-Rolla	32,222	15,749	120	4,283	11,577	493
U. MO-St. Louis	11,519	4,755	199	205	6,047	313
Private, total	454,974	336,064	7,935	19,263	61,052	30,660
Forest Institute of Professional Psychology	0	0	0	0	0	0
Kirksville C. of Osteopathic Medicine	1,134	895	0	0	141	98
St. Louis U. all campuses	35,444	31,215	277	3,161	589	202
U. of Health Sciences	1,436	513	121	2	800	0
Washington U. St. Louis	416,960	303,441	7,537	16,100	59,522	30,360
Montana, total	122,375	65,575	23,118	7,712	24,212	1,758
Public, total	122,375	65,575	23,118	7,712	24,212	1,758
MT State U.-Bozeman	78,211	39,986	19,487	6,161	12,577	0
MT Tech of The U. MT	4,797	2,977	1,521	299	0	0
U. MT, The	39,367	22,612	2,110	1,252	11,635	1,758

See explanatory information and SOURCE at end of table.

TABLE B-29. R&D expenditures at universities and colleges, by State, control, and source of funds: fiscal year 2002

(Dollars in thousands)

State, control, and institution	Total	Federal Government	State and local governments	Industry	Institu-tional funds	All other sources
Nebraska, total	266,930	89,322	9,936	21,104	129,790	16,778
Public, total	247,948	82,728	8,119	13,982	126,426	16,693
U. NE Medical Ctr.	71,000	28,602	3,161	7,165	20,279	11,793
U. NE Kearney	297	108	145	0	27	17
U. NE Lincoln	171,431	51,405	4,689	6,805	103,879	4,653
U. NE Omaha	5,220	2,613	124	12	2,241	230
Private, total	18,982	6,594	1,817	7,122	3,364	85
Creighton U.	18,982	6,594	1,817	7,122	3,364	85
Nevada, total	126,713	85,085	5,925	4,120	28,370	3,213
Public, total	126,713	85,085	5,925	4,120	28,370	3,213
Desert Research Institute	29,465	22,760	2,376	1,331	1,204	1,794
U. NV, Las Vegas	30,527	22,367	786	1,585	5,789	0
U. NV, Reno	66,721	39,958	2,763	1,204	21,377	1,419
New Hampshire, total	220,061	138,084	7,870	10,389	42,231	21,487
Public, total	93,222	50,829	4,650	5,964	23,011	8,768
U. NH	93,222	50,829	4,650	5,964	23,011	8,768
Private, total	126,839	87,255	3,220	4,425	19,220	12,719
Dartmouth C.	126,839	87,255	3,220	4,425	19,220	12,719
New Jersey, total	682,928	315,003	63,050	32,928	197,386	74,561
Public, total	502,251	208,104	55,089	24,585	154,939	59,534
C. NJ, The	2,686	456	738	0	1,492	0
Montclair State U.	889	383	0	0	417	89
NJ City U.	267	184	0	0	83	0
NJ Institute of Technology	61,424	25,641	9,429	688	16,009	9,657
Rutgers The State U. NJ all campuses	258,829	91,205	30,958	11,772	95,020	29,874
U. of Medicine and Dentistry NJ	178,156	90,235	13,964	12,125	41,918	19,914
Private, total	180,677	106,899	7,961	8,343	42,447	15,027
Fairleigh Dickinson U. all campuses	190	98	58	5	3	26
Monmouth U.	85	73	12	0	0	0
Princeton U.	164,408	97,724	4,575	8,292	41,713	12,104
Rider U.	939	218	66	13	471	171
Seton Hall U.	1,200	692	215	33	260	0
Stevens Institute of Technology	13,855e	8,094e	3,035e	0e	0e	2,726e
New Mexico, total	292,691	195,383	13,803	10,936	64,449	8,120
Public, total	292,691	195,383	13,803	10,936	64,449	8,120
NM Highlands U.	2,706	1,953	332	0	0	421
NM Institute of Mining and Technology	36,309	18,864	2,568	6,378	7,793	706
NM State U. all campuses	103,078	70,314	8,405	3,131	19,683	1,545
U. NM all campuses	150,598	104,252	2,498	1,427	36,973	5,448
New York, total	2,774,152	1,785,134	136,545	128,739	453,218	270,516
Public, total	673,234	379,939	36,012	30,652	153,799	72,832
CUNY Baruch C.	762	347	257	52	106	0
CUNY Brooklyn C.	6,217	2,538	282	310	1,911	1,176
CUNY City C.	17,103	13,319	1,393	1,967	287	137
CUNY C. Staten Island	1,944	1,315	27	141	244	217

See explanatory information and SOURCE at end of table.

TABLE B-29. R&D expenditures at universities and colleges, by State, control, and source of funds: fiscal year 2002

(Dollars in thousands)

State, control, and institution	Total	Federal Government	State and local governments	Industry	Institu-tional funds	All other sources
New York, continued:						
Public, continued:						
CUNY Graduate Ctr.	2,391	832	0	0	199	1,360
CUNY Herbert H. Lehman C.	2,955	2,816	0	0	96	43
CUNY Hunter C.	25,905	14,573	3,918	19	5,271	2,124
CUNY John Jay C. of Criminal Justice	844	201	88	0	0	555
CUNY Medgar Evers C.	992	970	0	18	4	0
CUNY Queens C.	6,718	5,516	211	848	143	0
CUNY York C.	1,664	1,650	0	0	14	0
SUNY Albany	67,493	40,497	8,974	1,337	9,381	7,304
SUNY Binghamton	21,343	8,959	1,312	2,654	2,900	5,518
SUNY Buffalo all campuses	239,735	128,842	9,677	12,726	55,482	33,008
SUNY C. Brockport	819 i	392 i	321 i	0 i	76 i	30 i
SUNY C. Buffalo	1,969	583	110	435	819	22
SUNY C. Cortland	353	316	0	0	31	6
SUNY C. Fredonia	235	104	15	2	49	65
SUNY C. Geneseo	682	481	7	45	117	32
SUNY C. Old Westbury	1,214	1,193	0	0	21	0
SUNY C. Oswego	1,112	901	22	7	182	0
SUNY C. Plattsburgh	1,061	760	78	45	145	33
SUNY C. of Environmental Science & Forestry	26,337	4,630	3,113	1,156	16,446	992
SUNY C. of Optometry	1,750	1,032	0	85	349	284
SUNY Health Science Ctr. Brooklyn	34,981 i	25,495 i	248 i	1,934 i	4,431 i	2,873 i
SUNY Purchase C.	284	151	51	14	0	68
SUNY Stony Brook all campuses	184,045	108,122	4,207	5,947	54,255	11,514
SUNY Upstate Medical U.	22,326	13,404	1,701	910	840	5,471
Private, total	2,100,918	1,405,195	100,533	98,087	299,419	197,684
Adelphi U.	152 i	114 i	0 i	5 i	5 i	28 i
Albany C. of Pharmacy	906	572	0	301	33	0
Albany Medical C.	13,104	8,901	211	188	2,626	1,178
Alfred U. all campuses	6,916	946	1,210	3,249	1,189	322
Barnard C.	1,064	1,021	0	0	0	43
Clarkson U.	8,322e	4,286e	762e	1,566e	1,708e	0e
Colgate U.	1,544	586	0	0	734	224
Columbia U. in the City of New York	405,403	356,749	1,825	3,110	16,939	26,780
Cooper Union	427	0	2	306	0	119
Cornell U. all campuses	496,123	270,578	59,239	27,341	90,810	48,155
Fordham U.	3,793	1,990	130	0	371	1,302
Hamilton C.	1,821	1,035	0	33	75	678
Hofstra U.	661e	402e	0e	106e	0e	153e
Iona C.	177	167	0	0	10	0
Ithaca C.	2,513	2,060	0	0	453	0
Long Island U. all campuses	1,477	1,162	24	100	71	120
Manhattan C.	257	257	0	0	0	0
Mt. Sinai School of Medicine	185,335	125,979	3,412	12,203	17,856	25,885
New School U.	5,791e	1,083e	0e	0e	0e	4,708e
NY Institute of Technology all campuses	380	84	23	4	199	70
NY Medical C.	25,222	19,318	454	3,802	50	1,598
NY U.	222,978	149,995	5,529	5,902	33,041	28,511
Pace U. all campuses	425	362	0	0	0	63
Polytechnic U.	10,915	4,918	1,824	2,825	1,144	204
Rensselaer Polytechnic Institute	45,955	26,490	4,554	5,142	6,041	3,728
Rochester Institute of Technology	13,500	7,868	1,515	2,633	0	1,484
Rockefeller U.	166,603	67,559	6,491	2,916	59,279	30,358
Skidmore C.	519	227	0	224	68	0
St. John's U. (Jamaica, NY)	1,315 i	1,060 i	86 i	0 i	169 i	0 i

See explanatory information and SOURCE at end of table.

TABLE B-29. R&D expenditures at universities and colleges, by State, control, and source of funds: fiscal year 2002

(Dollars in thousands)

State, control, and institution	Total	Federal Government	State and local governments	Industry	Institu-tional funds	All other sources
New York, continued:						
Private, continued:						
Syracuse U. all campuses	45,870	32,704	5,551	1,280	1,740	4,595
Teachers C. Columbia U.	10,409	5,939	0	0	0	4,470
Union C. (Schenectady, NY)	2,316	1,217	0	206	256	637
U. Rochester	261,601	195,298	7,691	24,645	21,696	12,271
Yeshiva U.	157,124	114,268	0	0	42,856	0
North Carolina, total	1,276,655	726,272	115,930	155,712	230,500	48,241
Public, total	722,577	372,495	103,974	43,347	192,595	10,166
Appalachian State U.	781	543	18	0	79	141
East Carolina U.	11,513	6,030	1,163	3,055	0	1,265
Elizabeth City State U.	1,058	1,058	0	0	0	0
Fayetteville State U.	311	311	0	0	0	0
NC Agricultural and Technical State U.	15,353	11,953	109	302	2,989	0
NC Central U.	1,035 i	971 i	0 i	0 i	0 i	64 i
NC State U.	290,018	75,204	85,879	31,579	89,769	7,587
U. NC Asheville	1,232	412	491	28	58	243
U. NC Chapel Hill	370,806	254,571	14,984	6,601	94,650	0
U. NC Charlotte	8,773	5,850	78	1,159	1,383	303
U. NC Greensboro	4,454	3,340	169	368	214	363
U. NC Wilmington	14,568	9,950	1,066	102	3,250	200
Western Carolina U.	653	280	17	153	203	0
Winston-Salem State U.	2,022	2,022	0	0	0	0
Private, total	554,078	353,777	11,956	112,365	37,905	38,075
Bennett C.	811 i	583 i	0 i	48 i	0 i	180 i
Duke U.	441,533	261,356	11,258	99,807	37,325	31,787
Johnson C. Smith U.	0	0	0	0	0	0
Shaw U.	100 i	100 i	0 i	0 i	0 i	0 i
Wake Forest U.	111,634	91,738	698	12,510	580	6,108
North Dakota, total	106,078	46,418	2,569	6,505	46,964	3,622
Public, total	106,078	46,418	2,569	6,505	46,964	3,622
ND State U. all campuses	72,105	21,414	1,614	1,801	43,654	3,622
U. ND all campuses	33,973	25,004	955	4,704	3,310	0
Ohio, total	1,116,957	642,804	78,725	80,567	229,258	85,603
Public, total	848,550	418,824	74,467	71,124	213,428	70,707
Air Force Institute of Technology	9,243	2,609	555	0	6,079	0
Bowling Green State U. all campuses	5,327	2,829	509	59	1,006	924
Central State U.	560 i	283 i	0 i	125 i	38 i	114 i
Cleveland State U.	13,855	4,649	4,104	1,747	3,174	181
Kent State U. all campuses	12,868	9,427	878	1,113	1,450	0
Medical C. OH	17,040	12,006	688	279	3,025	1,042
Miami U. all campuses	13,279	4,021	1,260	807	6,313	878
Northeastern OH Universities C. of Medicine	4,525	1,871	168	116	1,772	598
OH State U. all campuses	432,387	177,883	51,438	51,135	110,350	41,581
OH U. all campuses	36,601	17,677	2,809	2,729	12,106	1,280
U. Akron all campuses	28,080	9,537	2,194	2,568	9,360	4,421
U. Cincinnati all campuses	217,739	150,166	6,777	4,549	41,687	14,560
U. Toledo	24,825	8,996	318	1,988	8,733	4,790
Wright State U. all campuses	30,962	16,070	2,685	3,812	8,057	338
Youngstown State U.	1,259	800	84	97	278	0

See explanatory information and SOURCE at end of table.

TABLE B-29. R&D expenditures at universities and colleges, by State, control, and source of funds: fiscal year 2002

(Dollars in thousands)

State, control, and institution	Total	Federal Government	State and local governments	Industry	Institu-tional funds	All other sources
Ohio, continued:						
Private, total	268,407	223,980	4,258	9,443	15,830	14,896
Antioch U. all campuses	0	0	0	0	0	0
Case Western Reserve U.	219,042	181,888	3,390	5,555	14,049	14,160
C. Wooster	362	284	0	63	15	0
Denison U.	373	183	0	0	28	162
John Carroll U.	823	489	50	20	0	264
Oberlin C.	439	406	0	33	0	0
OH Wesleyan U.	284	203	0	0	35	46
Union Institute, The	0	0	0	0	0	0
U. Dayton	46,554	40,191	768	3,772	1,659	164
U. Findlay, The	250	100	50	0	0	100
Wilberforce U.	280 i	236 i	0 i	0 i	44 i	0 i
Oklahoma, total	282,062	112,438	40,462	19,530	93,459	16,173
Public, total	270,459	105,632	39,602	16,469	92,583	16,173
Langston U.	3,975	3,975	0	0	0	0
Northeastern State U.	1,314	919	378	17	0	0
OK State U. all campuses	94,987	31,100	24,091	3,752	35,029	1,015
U. Central OK	810	250	320	40	0	200
U. OK all campuses	169,373	69,388	14,813	12,660	57,554	14,958
Private, total	11,603	6,806	860	3,061	876	0
U. Tulsa	11,603	6,806	860	3,061	876	0
Oregon, total	386,666	273,901	42,027	11,720	36,531	22,487
Public, total	383,878	272,517	41,914	11,712	36,104	21,631
Eastern OR U.	398	243	0	0	155	0
OR Health Sciences U.	158,729	130,231	3,730	10,626	1,634	12,508
OR Institute of Technology	1,025	727	298	0	0	0
OR State U.	161,735	91,683	36,648	467	27,345	5,592
Portland State U.	17,683	11,914	901	551	3,253	1,064
Southern OR U.	585	542	6	0	25	12
U. OR	43,723	37,177	331	68	3,692	2,455
Private, total	2,788	1,384	113	8	427	856
Lewis and Clark C.	593	272	0	0	106	215
Pacific U.	157	157	0	0	0	0
Reed C.	1,145	583	0	0	125	437
U. Portland	639	285	113	5	32	204
Willamette U.	254	87	0	3	164	0
Pennsylvania, total	1,912,760	1,344,043	78,524	158,725	207,296	124,172
Public, total	959,567	638,308	59,591	85,463	136,328	39,877
East Stroudsburg U. PA	151	0	122	0	0	29
Indiana U. PA all campuses	794	476	3	206	109	0
Lincoln U. (Lincoln University, PA)	718	718	0	0	0	0
PA State U. all campuses	492,739	284,706	50,876	67,131	90,026	0
Temple U.	63,850	44,577	1,159	5,030	7,168	5,916
U. Pittsburgh all campuses	400,200	306,913	7,307	13,023	39,025	33,932
West Chester U. PA	1,115	918	124	73	0	0
Private, total	953,193	705,735	18,933	73,262	70,968	84,295
Allegheny C.	1,306	562	18	4	210	512
Bryn Mawr C.	3,502	751	489	15	1,851	396
Bucknell U.	1,900	1,240	331	329	0	0
Carnegie-Mellon U.	188,191	137,967	445	25,261	4,250	20,268
Dickinson C.	1,475	685	154	318	318	0

See explanatory information and SOURCE at end of table.

TABLE B-29. R&D expenditures at universities and colleges, by State, control, and source of funds: fiscal year 2002

(Dollars in thousands)

State, control, and institution	Total	Federal Government	State and local governments	Industry	Institu-tional funds	All other sources
Pennsylvania, continued:						
Private, continued:						
Drexel U.	44,465	30,232	826	795	11,268	1,344
Duquesne U.	5,955	2,232	410	203	2,929	181
Franklin and Marshall C.	989	441	0	0	315	233
Haverford C.	1,215	874	0	0	124	217
Juniata C.	283	101	0	0	0	182
La Salle U.	20	0	0	0	20	0
Lafayette C.	1,344	519	43	0	782	0
Lehigh U.	22,687	13,519	5,592	1,680	1,770	126
MCP Hahnemann U.	37,945	26,619	4,811	2,867	71	3,577
PA C. of Optometry	992	928	39	0	10	15
Philadelphia C. of Osteopathic Medicine	891	387	10	25	150	319
St. Joseph's U.	2,703	2,069	338	234	62	0
Swarthmore C.	1,574	1,107	48	0	321	98
Thomas Jefferson U.	102,974	79,217	2,968	13,209	1,933	5,647
U. PA	522,269	397,587	2,155	26,994	44,542	50,991
U. Scranton	3,873	3,715	0	116	42	0
U. of the Sciences in Philadelphia	833	311	0	522	0	0
Villanova U.	5,481e	4,551e	240	690	0	0
Widener U. all campuses	231 i	42 i	0 i	0 i	0 i	189 i
Wilkes U.	95	79	16	0	0	0
Rhode Island, total	163,052	113,841	6,293	2,538	35,622	4,758
Public, total	53,347	45,453	6,145	353	1,356	40
U. RI	53,347	45,453	6,145	353	1,356	40
Private, total	109,705	68,388	148	2,185	34,266	4,718
Brown U.	109,482	68,215	113	2,172	34,264	4,718
Providence C.	223	173	35	13	2	0
South Carolina, total	399,982	183,701	26,270	27,051	144,576	18,384
Public, total	397,304	181,529	26,175	27,051	144,576	17,973
Clemson U.	134,840	47,174	19,669	12,035	55,444	518
Coastal Carolina U.	1,100	787	75	0	225	13
C. Charleston	3,295	2,364	278	27	375	251
Medical U. SC	132,030	75,803	948	9,939	33,710	11,630
SC State U.	2,931	1,998	25	0	281	627
U. SC all campuses	123,108	53,403	5,180	5,050	54,541	4,934
Private, total	2,678	2,172	95	0	0	411
Benedict C.	1,061	966	95	0	0	0
Claflin C.	203	203	0	0	0	0
Furman U.	1,414	1,003	0	0	0	411
South Dakota, total	38,449	22,160	9,040	280	3,721	3,248
Public, total	38,145	21,895	9,040	280	3,682	3,248
SD School of Mines and Technology	9,692	6,950	571	55	1,951	165
SD State U.	20,085	9,115	8,295	225	1,050	1,400
U. SD	8,368	5,830	174	0	681	1,683
Private, total	304	265	0	0	39	0
Augustana C. (Sioux Falls, SD)	304	265	0	0	39	0

See explanatory information and SOURCE at end of table.

TABLE B-29. R&D expenditures at universities and colleges, by State, control, and source of funds: fiscal year 2002

(Dollars in thousands)

State, control, and institution	Total	Federal Government	State and local governments	Industry	Institu-tional funds	All other sources
Tennessee, total	490,994	315,789	49,337	20,527	79,017	26,324
Public, total	259,151	119,448	49,320	17,220	53,571	19,592
East TN State U.	11,701	3,908	4,867	0	165	2,761
Middle TN State U.	479	211	73	24	153	18
TN State U.	15,262	11,218	1	203	3,840	0
TN Technological U.	9,823	1,695	4,085	2,205	1,771	67
U. Memphis, The	33,625	14,072	3,279	268	14,040	1,966
U. TN Chattanooga	1,966	218	2	28	1,404	314
U. TN Martin	1,123	0	0	0	1,104	19
U. TN system office	185,172	88,126	37,013	14,492	31,094	14,447
Private, total	231,843	196,341	17	3,307	25,446	6,732
Fisk U.	3,030	3,030	0	0	0	0
Le Moyne-Owen C.	0	0	0	0	0	0
Meharry Medical C.	20,508	20,453	0	5	2	48
Vanderbilt U.	208,305	172,858	17	3,302	25,444	6,684
Texas, total	2,535,237	1,409,858	259,996	178,175	414,926	272,282
Public, total	2,057,020	1,100,681	252,916	154,859	352,875	195,689
Lamar U.	4,030	2,080	1,460	291	199	0
Prairie View A&M U.	10,444	7,712	2,208	108	416	0
Sam Houston State U.	2,976	2,386	319	100	171	0
Southwest TX State U.	8,109	4,144	2,427	78	417	1,043
Stephen F. Austin State U.	5,582	1,054	90	0	1,920	2,518
Sul Ross State U.	767	77	576	0	0	114
Tarleton State U.	7,871	5,216	75	0	2,484	96
TX A&M U. all campuses	436,681	163,488	110,703	33,300	122,752	6,438
TX A&M U. Commerce	263	37	16	0	50	160
TX A&M U. Corpus Christi	9,124	3,127	2,344	72	2,114	1,467
TX A&M U. Kingsville	8,208	1,956	1,204	174	2,988	1,886
TX A&M U. System Health Science Ctr.	49,636	22,417	12,302	2,005	7,782	5,130
TX Southern U.	4,189	3,910	216	63	0	0
TX Tech U.	82,785	28,202	25,151	6,774	17,596	5,062
TX Woman's U.	2,822	1,321	1,216	99	0	186
U. Houston	59,707	31,455	10,522	3,784	7,626	6,320
U. Houston-Clear Lake	8,362	7,460	422	38	346	96
U. Houston-Downtown	1,054	596	392	0	64	2
U. North TX	13,227	6,015	2,414	738	3,031	1,029
U. North TX Health Science Ctr. Ft. Worth	12,893	7,770	479	1,016	2,589	1,039
U. TX Arlington	15,097	7,848	2,078	2,288	2,883	0
U. TX Austin	320,966	219,158	19,381	26,114	41,650	14,663
U. TX Dallas	26,198	11,624	7,336	3,367	851	3,020
U. TX El Paso	23,684	16,457	3,965	2,040	1,222	0
U. TX Health Science Ctr. San Antonio	129,616	83,761	6,207	8,847	22,602	8,199
U. TX Houston Health Science Ctr.	138,380	98,676	3,808	11,241	11,128	13,527
U. TX M. D. Anderson Cancer Ctr.	262,145	117,633	0	33,407	71,155	39,950
U. TX Medical Branch Galveston	129,534	78,100	12,441	5,737	20,942	12,314
U. TX San Antonio	11,115	7,111	3,705	54	245	0
U. TX Southwestern Medical Ctr. Dallas	263,958	155,258	17,072	12,836	7,573	71,219
U. TX-Pan American	2,336	1,387	714	9	15	211
West TX A&M U.	5,261	3,245	1,673	279	64	0
Private, total	478,217	309,177	7,080	23,316	62,051	76,593
Abilene Christian U.	254	173	0	41	29	11
Baylor C. of Medicine	411,924	259,475	3,047	18,729	59,501	71,172
Baylor U.	3,868	830	658	1,051	739	590
Jarvis Christian C.	30	10	0	0	0	20

See explanatory information and SOURCE at end of table.

TABLE B-29. R&D expenditures at universities and colleges, by State, control, and source of funds: fiscal year 2002

(Dollars in thousands)

State, control, and institution	Total	Federal Government	State and local governments	Industry	Institu-tional funds	All other sources
Texas, continued:						
Private, continued:						
Rice U.	48,169	39,739	2,696	1,600	0	4,134
Southern Methodist U.	9,774	6,026	519	1,060	1,560	609
St. Mary's U. (San Antonio, TX)	293	152	0	0	141	0
TX Christian U.	3,300	2,492	122	607	79	0
Trinity U.	474	250	38	186	0	0
U. Dallas	116	30	0	42	2	42
Wiley C.	15	0	0	0	0	15
Utah, total	359,556	234,918	22,715	11,246	55,334	35,343
Public, total	338,328	222,018	21,493	9,117	52,075	33,625
U. UT	216,707	142,625	2,592	5,819	36,420	29,251
UT State U.	121,621	79,393	18,901	3,298	15,655	4,374
Private, total	21,228	12,900	1,222	2,129	3,259	1,718
Brigham Young U. all campuses	21,228	12,900	1,222	2,129	3,259	1,718
Vermont, total	90,189	59,430	4,363	7,169	14,387	4,840
Public, total	88,602	58,280	4,359	7,157	14,381	4,425
U. VT	88,602	58,280	4,359	7,157	14,381	4,425
Private, total	1,587	1,150	4	12	6	415
Middlebury C.	1,587	1,150	4	12	6	415
Virginia, total	693,606	405,984	81,259	51,573	113,265	41,525
Public, total	648,684	380,965	81,147	44,603	111,936	30,033
C. of William and Mary all campuses	39,858	18,007	4,252	1,043	14,423	2,133
George Mason U.	38,849	31,890	765	625	2,766	2,803
James Madison U.	2,867	1,372	924	0	279	292
Norfolk State U.	4,967	4,902	30	0	0	35
Old Dominion U.	29,223	17,170	6,299	3,318	2,436	0
Radford U.	562	357	123	58	24	0
U. VA all campuses	182,340	152,358	2,646	9,026	8,761	9,549
VA Commonwealth U.	109,619	65,028	2,507	9,053	28,672	4,359
VA Military Institute	695	10	4	580	58	43
VA Polytechnic Institute & State U.	232,560	82,976	63,402	20,866	54,497	10,819
VA State U.	7,144	6,895	195	34	20	0
Private, total	44,922	25,019	112	6,970	1,329	11,492
Eastern VA Medical School	28,572	13,077	112	3,926	110	11,347
Hampton U.	11,067	10,058	0	80	891	38
Institute of Textile Technology	2,826	0	0	2,816	10	0
U. Richmond	1,786	1,347	0	148	291	0
VA Union U.	671 i	537 i	0 i	0 i	27 i	107 i
Washington, total	748,493	548,176	17,684	50,762	105,498	26,373
Public, total	748,215	547,965	17,684	50,762	105,431	26,373
Central WA U.	1,738	1,468	143	0	90	37
Eastern WA U.	2,275	986	991	207	91	0
Evergreen State C.	441	441	0	0	0	0
U. WA	627,273	487,059	11,043	46,702	68,099	14,370
WA State U.	112,469	56,360	5,034	3,801	35,734	11,540
Western WA U.	4,019	1,651	473	52	1,417	426
Private, total	278	211	0	0	67	0
Whitman C.	278	211	0	0	67	0

See explanatory information and SOURCE at end of table.

TABLE B-29. R&D expenditures at universities and colleges, by State, control, and source of funds: fiscal year 2002

(Dollars in thousands)

State, control, and institution	Total	Federal Government	State and local governments	Industry	Institu-tional funds	All other sources
West Virginia, total	96,870	59,002	2,023	6,811	28,593	441
Public, total	96,515	58,896	2,023	6,811	28,352	433
Bluefield State C.	0	0	0	0	0	0
Marshall U. Graduate C.	11,285	9,502	51	16	1,295	421
WV School of Osteopathic Medicine	182	0	0	0	178	4
WV State C.	63 i	0 i	55 i	0 i	0 i	8 i
WV U.	84,985	49,394	1,917	6,795	26,879	0
Private, total	355	106	0	0	241	8
Salem International U.	355e	106e	0e	0e	241e	8e
Wisconsin, total	805,813	442,710	50,142	21,038	217,824	74,099
Public, total	696,807	362,253	45,928	17,294	207,065	64,267
U. WI Eau Claire	839	580	33	0	99	127
U. WI Green Bay	900	601	94	29	119	57
U. WI La Crosse	1,939	1,196	170	145	84	344
U. WI Madison	662,101	345,003	41,795	16,746	197,769	60,788
U. WI Milwaukee	24,933	11,461	3,498	297	7,894	1,783
U. WI Oshkosh	662	356	58	10	124	114
U. WI Parkside	769	563	18	4	142	42
U. WI River Falls	332	89	35	16	77	115
U. WI Stevens Point	1,849	639	187	1	337	685
U. WI Stout	1,358	1,003	34	1	250	70
U. WI Superior	889	552	0	45	160	132
U. WI Whitewater	236	210	6	0	10	10
Private, total	109,006	80,457	4,214	3,744	10,759	9,832
Marquette U.	9,807	3,565	3,793	860	691	898
Medical C. WI	96,700	76,241	171	1,642	9,785	8,861
Milwaukee School of Engineering	2,499	651	250	1,242	283	73
Wyoming, total	41,632	20,017	2,038	2,581	16,216	780
Public, total	41,632	20,017	2,038	2,581	16,216	780
U. WY	41,632e	20,017e	2,038e	2,581e	16,216e	780e
Guam, total	4,571	4,183	388	0	0	0
Public, total	4,571	4,183	388	0	0	0
U. GU	4,571	4,183	388	0	0	0
Puerto Rico, total	70,286	48,011	4,263	2,891	13,514	1,607
Public, total	58,764	37,767	3,965	2,246	13,181	1,605
U. PR Mayaguez Campus	19,939	8,865	3,794	629	5,573	1,078
U. PR Medical Sciences Campus	29,089	23,931	100	1,495	3,347	216
U. PR Rio Piedras Campus	9,736	4,971	71	122	4,261	311
Private, total	11,522	10,244	298	645	333	2
Ponce School of Medicine	4,365	3,720	0	645	0	0
Pontifical Catholic U. PR, The	54	54	0	0	0	0
Universidad Central Del Caribe	7,103	6,470	298	0	333	2
Virgin Islands, total	13,981	10,620	2,072	1,070	98	121
Public, total	13,981	10,620	2,072	1,070	98	121
U. of the VI	13,981	10,620	2,072	1,070	98	121

-- = not available.
e = estimated.
i = imputed.

NOTES: Because of rounding, detail may not add to totals. Beginning in fiscal year 1998, this table reports data for all institutions. In prior years this table reported on doctorate-granting institutions only.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-30. R&D expenditures at doctorate-granting institutions, by geographic division, State, and science and engineering field: fiscal year 2002

(Dollars in thousands)

Division and State	Total	Engineering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
Total	35,713,964	5,410,293	2,915,821	1,960,206	1,462,948	21,198,996	645,613	1,539,303	580,784
New England	2,750,337	382,960	265,636	233,877	125,503	1,505,655	59,987	111,535	65,184
Connecticut	532,990	26,477	30,673	12,522	8,513	426,179	13,829	14,150	647
Maine	62,149	13,041	4,190	18,952	1,947	19,654	550	3,746	69
Massachusetts	1,683,483	285,805	212,169	132,648	93,941	799,403	29,387	81,589	48,541
New Hampshire	220,061	35,388	7,056	39,731	6,015	111,534	6,818	5,211	8,308
Rhode Island	163,052	20,177	10,043	29,552	13,932	68,933	8,429	6,685	5,301
Vermont	88,602	2,072	1,505	472	1,155	79,952	974	154	2,318
Middle Atlantic	5,285,067	750,050	381,213	176,183	267,257	3,335,149	118,732	214,464	42,019
New Jersey	678,062	124,329	66,853	45,579	32,792	326,645	14,941	52,138	14,785
New York	2,719,479	290,285	193,188	99,004	98,503	1,882,088	63,120	75,224	18,067
Pennsylvania	1,887,526	335,436	121,172	31,600	135,962	1,126,416	40,671	87,102	9,167
East North Central	5,188,655	858,791	443,091	119,953	216,931	3,007,913	112,006	345,323	84,647
Illinois	1,415,092	182,452	135,634	45,300	103,674	837,165	30,897	59,200	20,770
Indiana	642,457	108,030	73,952	8,988	27,575	319,643	17,306	57,680	29,283
Michigan	1,225,238	222,125	96,871	10,621	26,484	716,179	22,241	128,443	2,274
Ohio	1,112,327	249,966	80,152	16,816	41,690	623,042	16,213	55,051	29,397
Wisconsin	793,541	96,218	56,482	38,228	17,508	511,884	25,349	44,949	2,923
West North Central	2,384,278	279,226	117,354	55,896	53,044	1,712,498	37,705	92,055	36,500
Iowa	481,351	73,243	28,765	6,370	13,960	324,959	5,165	19,612	9,277
Kansas	297,777	49,516	20,675	11,795	5,104	190,250	4,453	11,289	4,695
Minnesota	494,508	47,356	22,681	12,055	15,341	372,332	9,770	14,973	0
Missouri	699,786	54,128	23,965	10,338	9,735	567,512	10,281	22,439	1,388
Nebraska	266,633	27,931	13,028	7,548	7,244	174,777	7,172	13,140	15,793
North Dakota	106,078	19,924	6,326	3,572	1,444	61,797	684	7,611	4,720
South Dakota	38,145	7,128	1,914	4,218	216	20,871	180	2,991	627
South Atlantic	6,765,430	1,242,730	556,854	386,426	303,387	3,734,270	107,393	321,056	113,314
Delaware	85,157	31,312	13,042	10,293	2,936	20,921	1,230	5,423	0
District of Columbia	245,428	18,915	29,393	183	20,821	154,497	5,428	14,908	1,283
Florida	1,069,023	140,010	107,540	104,903	23,075	557,585	37,680	59,222	39,008
Georgia	1,060,591	257,406	55,451	29,503	58,583	565,639	25,526	54,661	13,822
Maryland	1,875,194	433,186	204,095	109,201	134,696	877,311	8,531	72,836	35,338
North Carolina	1,268,652	108,246	60,053	48,166	33,700	927,373	10,255	72,931	7,928
South Carolina	389,978	81,058	32,387	20,331	6,080	215,906	3,595	16,758	13,863
Virginia	674,955	143,964	50,246	58,052	22,959	361,947	14,824	22,806	157
West Virginia	96,452	28,633	4,647	5,794	537	53,091	324	1,511	1,915
East South Central	1,563,652	260,327	90,475	45,856	40,038	994,302	35,549	51,043	46,062
Alabama	482,720	80,570	26,513	10,658	9,070	334,725	8,604	7,477	5,103
Kentucky	318,437	46,782	9,541	3,462	7,415	220,957	5,805	8,697	15,778
Mississippi	277,620	63,296	30,505	21,237	10,520	123,744	3,738	9,197	15,383
Tennessee	484,875	69,679	23,916	10,499	13,033	314,876	17,402	25,672	9,798
West South Central	3,370,882	465,483	225,657	217,083	119,044	2,190,262	39,672	87,483	26,198
Arkansas	133,781	13,013	11,898	3,649	1,738	99,564	770	3,006	143
Louisiana	476,375	62,674	28,444	38,188	13,727	296,248	1,970	19,021	16,103
Oklahoma	275,963	42,785	25,352	35,662	5,955	126,076	13,694	25,054	1,385
Texas	2,484,763	347,011	159,963	139,584	97,624	1,668,374	23,238	40,402	8,567

See explanatory information and SOURCE at end of table.

TABLE B-30. R&D expenditures at doctorate-granting institutions, by geographic division, State, and science and engineering field: fiscal year 2002

(Dollars in thousands)

Division and State	Total	Engineering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
Mountain	2,176,986	424,519	252,361	208,985	64,221	1,017,801	43,588	80,080	85,431
Arizona	531,106	96,344	96,875	21,838	17,461	253,088	9,677	29,774	6,049
Colorado	617,093	90,842	78,198	100,620	11,288	290,530	14,727	18,273	12,615
Idaho	93,323	14,944	5,005	6,162	1,678	56,858	827	3,733	4,116
Montana	117,578	9,921	14,577	1,384	1,209	74,101	155	7,446	8,785
Nevada	126,713	14,549	9,549	43,952	2,180	37,932	975	3,501	14,075
New Mexico	289,985	104,277	21,181	13,463	5,734	99,144	11,035	8,665	26,486
Utah	359,556	89,998	23,907	15,083	24,136	186,433	5,421	7,116	7,462
Wyoming	41,632	3,644	3,069	6,483	535	19,715	771	1,572	5,843
Pacific	6,158,391	736,260	578,985	509,179	272,708	3,656,743	89,809	233,278	81,429
Alaska	116,279	8,094	1,405	71,747	9,040	22,224	0	1,924	1,845
California	4,758,520	621,557	506,835	276,949	233,265	2,800,758	64,396	190,913	63,847
Hawaii	161,823	7,339	22,167	45,908	10,115	58,286	761	3,514	13,733
Oregon	382,027	22,912	14,111	38,405	8,152	268,408	15,673	13,370	996
Washington	739,742	76,358	34,467	76,170	12,136	507,067	8,979	23,557	1,008
Outlying areas	70,286	9,947	4,195	6,768	815	44,403	1,172	2,986	0

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-31. R&D expenditures at universities and colleges, by State, control, and science and engineering field: fiscal year 2002

(Dollars in thousands)

State, control, and institution	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
United States, total	36,332,641	5,504,227	3,008,466	2,022,423	1,512,515	21,404,172	670,622	1,582,888	627,328
Public, total	24,830,706	3,961,209	2,025,683	1,655,010	924,480	14,075,618	496,651	1,247,427	444,628
Private, total	11,501,935	1,543,018	982,783	367,413	588,035	7,328,554	173,971	335,461	182,700
Alabama, total	503,470	82,150	28,954	11,372	10,068	345,983	9,129	10,048	5,766
Public, total	484,153	80,570	26,513	10,658	9,280	335,886	8,604	7,539	5,103
AL A&M U.	15,717	521	2,060	0	583	11,063	0	393	1,097
AL State U.	1,433	0	0	0	210	1,161	0	62	0
Auburn U. all campuses	108,775	32,315	3,625	827	522	65,769	237	2,398	3,082
U. AL Birmingham, The	255,053	6,639	2,962	0	676	238,232	5,895	649	0
U. AL Huntsville, The	48,353	20,999	12,474	7,003	5,239	2,189	22	147	280
U. AL, The	37,130	19,321	5,165	1,896	1,669	3,067	2,226	3,142	644
U. South AL	17,692	775	227	932	381	14,405	224	748	0
Private, total	19,317	1,580	2,441	714	788	10,097	525	2,509	663
Miles C.	8,785	564 i	2,053 i	706 i	767 i	3,010 i	525 i	497 i	663 i
Oakwood C.	567 i	0 i	202 i	8 i	21 i	336 i	0 i	0 i	0 i
Selma U.	0	0	0	0	0	0	0	0	0
Talladega C.	0	0	0	0	0	0	0	0	0
Tuskegee U.	9,965	1,016	186	0	0	6,751	0	2,012	0
Alaska, total	128,875	8,216	1,539	71,911	9,124	22,489	44	1,971	13,581
Public, total	128,832	8,216	1,539	71,868	9,124	22,489	44	1,971	13,581
U. AK Anchorage all campuses	11,685e	0 i	0 i	0 i	0 i	0 i	0 i	0 i	11,685 i
U. AK Fairbanks all campuses	116,279	8,094	1,405	71,747	9,040	22,224	0	1,924	1,845
U. AK Southeast	868e	122 i	134 i	121 i	84 i	265 i	44 i	47 i	51 i
Private, total	43	0	0	43	0	0	0	0	0
AK Pacific U.	43	0	0	43	0	0	0	0	0
Arizona, total	531,106	96,344	96,875	21,838	17,461	253,088	9,677	29,774	6,049
Public, total	531,106	96,344	96,875	21,838	17,461	253,088	9,677	29,774	6,049
AZ State U. main campus	123,016	47,861	17,772	10,379	6,567	18,086	6,308	10,083	5,960
Northern AZ U.	17,263	745	1,243	1,240	126	12,110	27	1,704	68
U. AZ	390,827	47,738	77,860	10,219	10,768	222,892	3,342	17,987	21
Arkansas, total	140,283	13,093	12,275	3,850	1,739	105,193	770	3,220	143
Public, total	140,283	13,093	12,275	3,850	1,739	105,193	770	3,220	143
AR State U. main campus	1,278	190	122	227	4	722	13	0	0
AR Tech U.	526e	80e	10e	201e	1e	223e	0e	11e	0e
U. AR Little Rock	2,088e	801e	137e	180e	378e	285e	277e	0e	30e
U. AR Pine Bluff	5,976	0	367	0	0	5,406	0	203	0
U. AR for Medical Sciences	45,046	0	0	0	0	45,046	0	0	0
U. AR main campus	83,063	11,613	11,336	2,881	1,144	52,830	409	2,850	0
U. Central AR	2,306	409 i	303 i	361 i	212 i	681 i	71 i	156 i	113 i
Private, total	0	0	0	0	0	0	0	0	0
Philander Smith C.	0	0	0	0	0	0	0	0	0
California, total	4,881,791	638,732	519,158	296,328	243,754	2,839,898	73,117	197,552	73,252
Public, total	3,650,974	414,839	337,192	255,657	138,759	2,216,263	61,362	173,847	53,055
CA State Polytechnic U. Pomona	2,806	0	0	0	0	2,806	0	0	0
CA State Polytechnic U. San Luis Obispo	14,002	4,373	179	868	3,167	4,099	0	263	1,053
CA State U. Bakersfield	4,199 i	717 i	412 i	679 i	237 i	1,127 i	67 i	305 i	655 i

See explanatory information and SOURCE at end of table.

TABLE B-31. R&D expenditures at universities and colleges, by State, control, and science and engineering field: fiscal year 2002

(Dollars in thousands)

State, control, and institution	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
California, continued:									
Public, continued:									
CA State U. Chico	5,486	392	22	376	1,444	1,210	0	1,112	930
CA State U. Dominguez Hills	3,970	0	352	456	1,595	1,515	52	0	0
CA State U. Fresno	9,398	831	81	120	63	7,932	371	0	0
CA State U. Fullerton	9,282	1,836 i	1,539 i	938 i	626 i	2,818 i	260 i	1,004 i	261 i
CA State U. Hayward	2,455	352 i	376 i	338 i	238 i	749 i	131 i	132 i	139 i
CA State U. Long Beach	8,026	435	1,074	635	475	1,534	2,528	235	1,110
CA State U. Los Angeles	7,933	840	1,254	1,055	79	4,330	0	375	0
CA State U. Monterey Bay	1,911e	191e	153e	192e	94e	299e	20e	115e	847e
CA State U. Northridge	10,619	1,932	1,847	893	140	1,816	524	447	3,020
CA State U. San Bernardino	3,740	0	274	540	557	1,174	16	727	452
Humboldt State U.	7,123 i	1,031 i	23 i	604 i	477 i	4,256 i	10 i	584 i	138 i
Naval Postgraduate School	45,227 i	12,031 i	2,849 i	10,899 i	9,404 i	0 i	0 i	6,196 i	3,848 i
San Diego State U.	64,302	8,430	3,660	4,646	2,919	24,271	7,975	5,655	6,746
San Francisco State U.	14	3 i	4 i	1 i	0 i	4 i	0 i	0 i	2 i
San Jose State U.	25,003	2,702	3,142	9,517	1,478	462	6,530	95	1,077
Sonoma State U.	341	0	12	2	0	316	0	11	0
U. CA Berkeley	474,746	137,766	78,918	7,069	7,980	170,348	9,823	51,204	11,638
U. CA Davis	456,653	42,674	21,445	29,532	4,793	336,796	1,188	16,578	3,647
U. CA Irvine	209,469	22,888	20,286	6,857	9,793	135,406	4,649	9,472	118
U. CA Los Angeles	787,598	51,371	68,211	14,824	15,320	573,899	11,188	42,971	9,814
U. CA Riverside	111,936	14,806	7,524	12,273	2,712	59,043	1,737	9,886	3,955
U. CA San Diego	585,008	61,208	38,999	114,136	58,623	293,994	6,182	10,532	1,334
U. CA San Francisco	596,965	0	27,262	0	0	569,703	0	0	0
U. CA Santa Barbara	131,795	44,475	25,959	22,840	12,748	4,290	7,077	12,285	2,121
U. CA Santa Cruz	70,967	3,555	31,335	15,367	3,797	12,066	1,034	3,663	150
Private, total	1,230,817	223,893	181,966	40,671	104,995	623,635	11,755	23,705	20,197
Alliant International U.	368	0	0	0	0	0	368	0	0
Azusa Pacific U.	0	0	0	0	0	0	0	0	0
Biola U.	0	0	0	0	0	0	0	0	0
CA Institute of Integral Studies	0	0	0	0	0	0	0	0	0
CA Institute of Technology	220,004	43,931	107,140	13,131	7,272	37,600	0	1,037	9,893
Chapman U.	1,068	0	0	446	0	102	204	243	73
Charles R. Drew U. of Medicine & Science	48,839	0	0	0	0	48,839	0	0	0
Claremont Graduate U.	1,949	0	0	0	280	0	947	722	0
Golden Gate U.	0	0	0	0	0	0	0	0	0
Harvey Mudd C.	7,306 i	1,975 i	1,109 i	74 i	263 i	3,160 i	51 i	302 i	372 i
Loma Linda U.	23,996	0	0	0	0	19,545	0	1	4,450
Occidental C.	2,503	0	679	49	1	397	2	916	459
Pepperdine U.	0	0	0	0	0	0	0	0	0
Pitzer C.	287	0	0	0	0	0	228	59	0
Point Loma Nazarene C.	102	0	79	0	0	23	0	0	0
Pomona C.	2,063	0	786	81	30	555	459	152	0
Santa Clara U.	3,024 i	1,662 i	190 i	0 i	134 i	423 i	9 i	606 i	0 i
Stanford U.	538,474	126,204	63,387	8,809	20,292	304,658	4,837	10,287	0
U. Redlands	2,728	0	0	2,596	0	92	0	40	0
U. San Diego	2,686	129 i	145 i	0 i	0 i	784 i	0 i	91 i	1,537 i
U. Southern CA	372,397	49,750	8,448	15,381	76,723	205,018	4,650	9,249	3,178
U. of the Pacific	1,891	242	3	104	0	1,406	0	0	136
Western U. of Health Sciences	1,132	0	0	0	0	1,033	0	0	99

See explanatory information and SOURCE at end of table.

TABLE B-31. R&D expenditures at universities and colleges, by State, control, and science and engineering field: fiscal year 2002

(Dollars in thousands)

State, control, and institution	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
Colorado, total	645,291	108,772	82,318	100,808	12,026	292,167	16,862	19,464	12,874
Public, total	633,347	105,573	79,544	100,475	11,839	290,586	14,276	18,302	12,752
CO School of Mines	26,515	17,672	6,789	1,283	597	0	0	174	0
CO State U.	178,845	37,060	10,549	38,167	3,459	69,291	3,979	4,651	11,689
Ft. Lewis C.	286	0	209	0	0	63	0	14	0
U.S. Air Force Academy	25,589	17,901	3,259	0	657	887	2,024	861	0
U. CO Boulder	201,222	31,618	57,603	60,706	6,650	24,624	8,003	11,370	648
U. CO Colorado Springs	2,248	458	593	72	233	452	101	339	0
U. CO Denver	2,902	835	183	118	208	932	142	323	161
U. CO Health Sciences Ctr.	193,446	0	0	0	0	193,446	0	0	0
U. Northern CO	1,376	0	53	124	35	459	19	569	117
U. Southern CO	597	29	296	0	0	263	8	1	0
Western State C. CO	321	0	10	5	0	169	0	0	137
Private, total	11,944	3,199	2,774	333	187	1,581	2,586	1,162	122
CO C.	1,286	0	273	183	81	209	103	315	122
Regis U.	119	0 i	73 i	0 i	0 i	46 i	0 i	0 i	0 i
U. Denver	10,539	3,199	2,428	150	106	1,326	2,483	847	0
Connecticut, total	538,070	27,701	31,521	12,711	10,153	426,717	14,014	14,502	751
Public, total	173,775	16,967	8,035	9,917	1,956	119,328	7,505	9,384	683
Central CT State U.	283	0	22	0	0	96	0	165	0
Southern CT State U.	361	3	7	137	0	0	130	0	84
U.S. Coast Guard Academy	1,128	787	341	0	0	0	0	0	0
U. CT all campuses	172,003	16,177	7,665	9,780	1,956	119,232	7,375	9,219	599
Private, total	364,295	10,734	23,486	2,794	8,197	307,389	6,509	5,118	68
CT C.	542 i	130 i	124 i	4 i	30 i	208 i	2 i	24 i	20 i
Fairfield U.	810	76	286	5	104	170	6	163	0
Trinity C. (Hartford, CT)	464	228	68	43	14	64	47	0	0
U. Hartford	1,130	395	115	0	126	34	0	412	48
U. New Haven	1,492e	0e	0e	0e	1,492e	0e	0e	0e	0e
Wesleyan U.	5,614	0	2,162	191	96	2,568	467	130	0
Yale U.	354,243	9,905	20,731	2,551	6,335	304,345	5,987	4,389	0
Delaware, total	88,319	31,312	13,711	10,293	3,042	23,292	1,230	5,423	16
Public, total	88,319	31,312	13,711	10,293	3,042	23,292	1,230	5,423	16
DE State U.	3,162	0	669	0	106	2,371e	0	0	16e
U. DE	85,157	31,312	13,042	10,293	2,936	20,921	1,230	5,423	0
District of Columbia, total	251,601	19,073	29,835	359	20,821	156,312	6,547	17,256	1,398
Public, total	4,223	158	442	176	0	1,423	2	1,907	115
U. DC	4,223	158	442	176	0	1,423	2	1,907	115
Private, total	247,378	18,915	29,393	183	20,821	154,889	6,545	15,349	1,283
American U.	4,420	0	777	0	277	53	436	2,877	0
Catholic U. America	22,883	1,805	18,565	0	0	783	957	754	19
Gallaudet U.	1,950	0	0	0	0	392	1,117	441	0
George Washington U.	86,288	13,763	2,719	182	17,434	42,278	1,065	7,587	1,260
Georgetown U.	96,450	0	5,172	0	353	87,245	417	3,263	0
Howard U.	35,387	3,347	2,160	1	2,757	24,138	2,553	427	4
Florida, total	1,085,764	140,941	110,204	105,599	28,552	560,576	37,797	60,383	41,712
Public, total	898,553	136,750	105,847	64,875	25,446	440,649	28,576	57,463	38,947
FL A&M U.	31,147	2,777	1,475	441	0	10,940	2	49	15,463
FL Atlantic U.	23,995	8,401	1,674	572	2,196	6,546	1,691	2,288	627
FL International U.	47,654	17,366	3,660	3,883	2,799	4,981	584	8,926	5,455

See explanatory information and SOURCE at end of table.

TABLE B-31. R&D expenditures at universities and colleges, by State, control, and science and engineering field: fiscal year 2002

(Dollars in thousands)

State, control, and institution	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
Florida, continued:									
Public, continued:									
FL State U.	134,351	15,500	49,388	19,232	5,884	15,637	6,579	22,103	28
New C. FL	132	0	29	0	4	32	9	58	0
U. Central FL	66,351	9,972	15,645	9,238	400	5,814	1,902	6,006	17,374
U. FL	386,316	63,205	28,654	5,470	8,752	260,138	6,371	13,726	0
U. North FL	2,061	397	101	0	128	1,281	22	132	0
U. South FL	197,894	19,132	3,555	25,479	393	134,360	11,416	3,559	0
U. West FL	8,652	0	1,666	560	4,890	920	0	616	0
Private, total	187,211	4,191	4,357	40,724	3,106	119,927	9,221	2,920	2,765
Bethune Cookman C.	794	0	36	0	0	758	0	0	0
Embry-Riddle Aeronautical U.	5,102	534	832	136	455	0	86	355	2,704
FL Institute of Technology	6,669	1,293	737	874	2,460	1,080	225	0	0
Nova Southeastern U.	3,327	0	0	2,439	0	329	498	0	61
U. Miami	171,319	2,364	2,752	37,275	191	117,760	8,412	2,565	0
Georgia, total	1,076,424	258,273	57,403	32,307	58,786	573,222	26,053	55,535	14,845
Public, total	730,831	237,376	39,667	32,031	57,088	283,611	23,835	49,434	7,789
Albany State U.	1,987	622	2	339	42	374	0	499	109
Ft. Valley State U.	2,985	0 i	0 i	0 i	0 i	2,931 i	0 i	54 i	0 i
GA Institute of Technology all campuses	340,347	228,484	23,024	15,590	46,455	10,825	4,524	3,765	7,680
GA Southern U.	1,127	0	119	211	46	663	0	88	0
GA State U.	44,564	0	4,901	505	2,572	17,258	9,009	10,319	0
Kennesaw State U.	221	0	221	0	0	0	0	0	0
Medical C. GA	51,705	0	0	0	0	51,705	0	0	0
Savannah State U.	2,206	245	0	1,597	0	364	0	0	0
State U. West GA	1,029	0	255	390	28	336	0	20	0
U. GA	284,660	8,025	11,145	13,399	7,945	199,155	10,302	34,689	0
Private, total	345,593	20,897	17,736	276	1,698	289,611	2,218	6,101	7,056
Clark Atlanta U.	17,194	2,531	3,772	0	1,044	2,988	0	960	5,899
Emory U.	271,238	0	8,673	9	517	255,462	1,663	4,914	0
Institute of Paper Science and Technology	13,929e	9,611e	2,925e	0e	0e	1,393e	0e	0e	0e
Mercer U. all campuses	12,998	8,755	1,011	0	50	2,897	28	14	243
Morehouse C.	2,853 i	0 i	293 i	0 i	63 i	1,097 i	273 i	213 i	914 i
Morehouse School of Medicine	23,956	0	0	0	0	23,956	0	0	0
Morris Brown C.	343	0	208	0	3	72	60	0	0
Spelman C.	3,082	0	854	267	21	1,746	194	0	0
Hawaii, total	172,664	7,339	22,277	46,730	10,115	63,786	761	4,895	16,761
Public, total	172,664	7,339	22,277	46,730	10,115	63,786	761	4,895	16,761
U. HI Hilo	10,841	0	110	822	0	5,500	0	1,381	3,028
U. HI Manoa	161,823	7,339	22,167	45,908	10,115	58,286	761	3,514	13,733
Idaho, total	93,323	14,944	5,005	6,162	1,678	56,858	827	3,733	4,116
Public, total	93,323	14,944	5,005	6,162	1,678	56,858	827	3,733	4,116
Boise State U.	6,446	2,319	274	1,707	136	1,041	621	68	280
ID State U.	10,119	401	2,311	511	40	4,956	6	364	1,530
U. ID	76,758	12,224	2,420	3,944	1,502	50,861	200	3,301	2,306
Illinois, total	1,440,538	186,159	138,238	48,071	106,658	841,004	31,223	64,341	24,844
Public, total	779,766	133,011	70,574	42,959	96,499	349,537	18,108	48,388	20,690
Chicago State U.	1,297	0	0	0	0	0	0	0	1,297
IL State U.	3,848	0	576	49	295	2,362	133	379	54
Northeastern IL U.	216	0	0	112	20	62	14	0	8

See explanatory information and SOURCE at end of table.

TABLE B-31. R&D expenditures at universities and colleges, by State, control, and science and engineering field: fiscal year 2002

(Dollars in thousands)

State, control, and institution	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
Illinois, continued:									
Public, continued:									
Northern IL U.	10,366	336	4,935	837	533	2,179	1,426	120	0
Southern IL U. Carbondale	53,604	9,236	1,530	1,507	522	34,114	481	2,831	3,383
Southern IL U. Edwardsville	14,043	2,764	499	1,984	586	1,254	111	4,076	2,769
U. IL Chicago	259,852	15,679	12,918	1,480	14,288	186,570	6,273	13,319	9,325
U. IL Springfield	2,324	0	338	158	0	86	0	1,738	4
U. IL Urbana-Champaign	427,174	104,577	48,218	36,157	78,629	121,383	9,485	24,875	3,850
Western IL U.	7,042	419	1,560	675	1,626	1,527	185	1,050	0
Private, total	660,772	53,148	67,664	5,112	10,159	491,467	13,115	15,953	4,154
Bradley U.	1,928	524	425	0	733	240	0	6	0
Depaul U.	2,389	0	73	5	103	147	2,011	50	0
Finch U. of Health Sciences/ Chicago Medical School	8,645	0	0	0	0	8,069	576	0	0
IL Institute of Technology	19,909	4,750	8,041	0	861	5,874	373	0	10
Knox C.	60	0	26	0	19	15	0	0	0
Lake Forest C.	283	0	94	0	0	164	16	9	0
Loyola U. (Chicago, IL)	37,607	0	1,901	26	137	33,352	1,168	1,023	0
Midwestern U.	2,562	0	0	0	0	2,562	0	0	0
National U. of Health Sciences	577	0	0	0	0	577	0	0	0
Northwestern U.	282,154	47,655	23,694	522	3,699	186,653	3,314	12,473	4,144
Rush U.	79,394	0	0	0	0	77,581	1,813	0	0
U. Chicago	225,264	219	33,410	4,559	4,607	176,233	3,844	2,392	0
Indiana, total	650,718	112,768	76,501	8,988	28,549	319,643	17,306	57,680	29,283
Public, total	590,086	94,642	56,160	8,988	25,732	310,354	15,129	55,445	23,636
Ball State U.	4,008	29	359	531	230	1,860	22	927	50
IN State U. all campuses	1,220	0	34	244	0	344	83	515	0
IN U. all campuses	299,080	3,243	34,095	4,085	11,133	179,224	10,500	33,908	22,892
Purdue U. all campuses	285,778	91,370	21,672	4,128	14,369	128,926	4,524	20,095	694
Private, total	60,632	18,126	20,341	0	2,817	9,289	2,177	2,235	5,647
Rose-Hulman Institute of Technology	7,912	4,733	2,205	0	974	0	0	0	0
U. of Notre Dame	52,371	13,388	17,792	0	1,843	9,289	2,177	2,235	5,647
Valparaiso U.	349	5	344	0	0	0	0	0	0
Iowa, total	485,756	73,243	29,613	6,639	14,213	326,709	5,168	20,717	9,454
Public, total	479,726	73,243	28,813	6,639	13,960	322,622	5,165	20,007	9,277
IA State U.	188,664	45,727	10,218	4,192	12,269	93,870	644	12,834	8,910
U. IA	288,808	27,516	18,547	2,178	1,691	227,210	4,521	6,778	367
U. Northern IA	2,254	0	48	269	0	1,542	0	395	0
Private, total	6,030	0	800	0	253	4,087	3	710	177
Des Moines U. Osteopathic Medical Ctr.	767e	0e	0e	0e	0e	767e	0e	0e	0e
Drake U.	1,053	0	213	0	3	109	0	551	177
Grinnell C.	1,098	0	587	0	250	99	3	159	0
Maharishi U. of Management	3,112	0	0	0	0	3,112	0	0	0
Kansas, total	299,728	51,166	20,719	11,795	5,161	190,402	4,453	11,336	4,696
Public, total	299,728	51,166	20,719	11,795	5,161	190,402	4,453	11,336	4,696
KS State U.	106,804	16,488	11,131	509	2,596	68,452	1,245	3,952	2,431
Pittsburg State U.	1,951	1,650	44	0	57	152	0	47	1
U. KS all campuses	172,131	19,096	7,768	11,261	2,012	121,057	1,772	6,901	2,264
Wichita State U.	18,842	13,932	1,776	25	496	741	1,436	436	0

See explanatory information and SOURCE at end of table.

TABLE B-31. R&D expenditures at universities and colleges, by State, control, and science and engineering field: fiscal year 2002

(Dollars in thousands)

State, control, and institution	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
Kentucky, total	332,853	47,024	14,108	3,775	7,498	229,600	6,202	8,868	15,778
Public, total	331,665	47,024	14,108	3,775	6,310	229,600	6,202	8,868	15,778
Eastern KY U.	666	0	229	1	0	427	2	7	0
KY State U.	6,188	13	107	0	0	6,068	0	0	0
Murray State U.	2,112	0	58	291	46	1,591	3	123	0
Northern KY U.	169	0	46	0	37	24	21	41	0
U. KY all campuses	236,275	39,297	7,767	3,053	5,903	156,833	3,400	4,867	15,155
U. Louisville	80,974	7,485	1,774	409	324	64,124	2,405	3,830	623
Western KY U.	5,281	229	4,127	21	0	533	371	0	0
Private, total	1,188	0	0	0	1,188	0	0	0	0
Spalding U.	1,188	0	0	0	1,188	0	0	0	0
Louisiana, total	482,785	62,777	29,856	38,620	14,823	298,630	2,303	19,130	16,646
Public, total	372,846	55,194	24,861	37,383	13,081	209,598	1,920	14,879	15,930
Grambling State U.	2,452	0	555	23	994	880	0	0	0
LA State U. Health Sciences Ctr.	64,167	0	0	0	0	64,167	0	0	0
LA State U. Shreveport	128	0	5	0	0	80	0	43	0
LA State U. and Agricultural and Mechanical C.	198,006	30,439	13,916	33,906	4,333	103,034	346	6,492	5,540
LA Tech U.	12,110	7,168	1,703	0	799	1,783	135	522	0
McNeese State U.	709	102	77	409	94	16	11	0	0
Nicholls State U.	820	0	32	0	8	392	322	66	0
Southeastern LA U.	836	1	180	0	0	655	0	0	0
Southern U. A&M C. all campuses	10,012 i	1,196 i	1,773 i	772 i	251 i	5,534 i	133 i	353 i	0 i
Southern U. New Orleans	937	0	35	0	0	359	0	0	543
U. LA Lafayette	47,796	3,931	692	289	6,243	30,367	159	907	5,208
U. LA Monroe, The	9,811 i	0 i	146 i	576 i	50 i	830 i	0 i	3,570 i	4,639 i
U. New Orleans	25,062	12,357	5,747	1,408	309	1,501	814	2,926	0
Private, total	109,939	7,583	4,995	1,237	1,742	89,032	383	4,251	716
Dillard U.	528	0	528	0	0	0	0	0	0
Tulane U.	102,998	7,181	2,515	1,237	1,742	85,598	383	4,251	91
Xavier U. LA	6,413	402 i	1,952 i	0 i	0 i	3,434 i	0 i	0 i	625 i
Maine, total	69,222	13,041	5,395	19,778	2,160	21,721	557	6,474	96
Public, total	63,900	13,041	4,190	19,306	2,033	20,822	550	3,889	69
U. ME	62,149	13,041	4,190	18,952	1,947	19,654	550	3,746	69
U. Southern ME	1,751 i	0 i	0 i	354 i	86 i	1,168 i	0 i	143 i	0 i
Private, total	5,322	0	1,205	472	127	899	7	2,585	27
Bates C.	1,217	0	466	338	4	395	5	0	9
Bowdoin C.	1,176	0	430	59	105	366	2	214	0
Colby C.	2,929	0	309	75	18	138	0	2,371	18
Maryland, total	1,880,122	434,289	204,804	109,510	137,062	877,598	8,532	72,989	35,338
Public, total	738,747	84,531	88,705	73,719	40,045	381,573	5,161	64,796	217
Bowie State U.	2,330	0	0	0	1,985	228	0	117	0
Coppin State C.	0	0	0	0	0	0	0	0	0
Morgan State U.	1,674	1,073	0	0	588	1	0	12	0
St. Mary's C. MD	274	0	55	154	5	59	1	0	0
Towson U.	2,449	0	547	66	1,154	442	0	23	217
Uniformed Services U. of the Health Sciences	28,630	0	0	0	0	28,630	0	0	0
U.S. Naval Academy	2,324	1,103	654	155	376	0	0	36	0
U. MD Baltimore	266,822	0	0	0	0	266,822	0	0	0
U. MD Baltimore County	36,323	7,195	6,134	15,336	1,334	3,099	1,190	2,035	0

See explanatory information and SOURCE at end of table.

TABLE B-31. R&D expenditures at universities and colleges, by State, control, and science and engineering field: fiscal year 2002

(Dollars in thousands)

State, control, and institution	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
Maryland, continued:									
Public, continued:									
U. MD Biotechnology Institute	34,440	0	0	8,558	0	25,882	0	0	0
U. MD Ctr. for Environmental Science	38,501	0	0	38,501	0	0	0	0	0
U. MD College Park	324,980	75,160	81,315	10,949	34,603	56,410	3,970	62,573	0
U. MD Eastern Shore	0	0	0	0	0	0	0	0	0
Private, total	1,141,375	349,758	116,099	35,791	97,017	496,025	3,371	8,193	35,121
Johns Hopkins U., The	1,140,235	349,481	115,899	35,791	96,354	496,025	3,371	8,193	35,121
Loyola C.	1,140	277	200	0	663	0	0	0	0
Massachusetts, total	1,705,807	287,498	215,977	133,568	95,514	805,513	30,075	85,411	52,251
Public, total	293,512	33,683	35,028	12,942	19,522	169,595	7,503	13,471	1,768
Bridgewater State C.	473	0	124	11	3	30	4	301	0
U. MA Amherst	109,332	21,224	26,779	4,550	17,415	30,158	5,144	2,899	1,163
U. MA Boston	13,121	45	367	1,710	215	2,198	490	8,030	66
U. MA Dartmouth	15,030	5,789	1,440	4,703	1,428	1,383	88	168	31
U. MA Lowell	22,827	6,625	6,318	1,968	461	3,097	1,777	2,073	508
U. MA Worcester	132,729	0	0	0	0	132,729	0	0	0
Private, total	1,412,295	253,815	180,949	120,626	75,992	635,918	22,572	71,940	50,483
Amherst C.	2,115	0	883	77	20	793	91	251	0
Boston C.	31,754	0	8,421	687	13,743	3,450	580	4,873	0
Boston U.	192,612	20,875	15,800	3,335	2,998	130,144	6,004	1,461	11,995
Brandeis U.	47,122	0	5,230	0	2,090	21,187	1,882	16,733	0
Clark U.	3,418	0	741	0	26	210	329	2,112	0
C. of the Holy Cross	532	0	197	0	106	7	147	75	0
Hampshire C.	3,224	429	497	98	322	322	147	1,339	70
Harvard U.	401,367	6,773	35,156	15,095	4,287	307,150	6,168	26,738	0
MA C. of Pharmacy & Health Sciences	392	0	0	0	0	392	0	0	0
MA Institute of Technology	455,491	171,606	99,254	22,007	46,468	74,762	823	5,793	34,778
Mt. Holyoke C.	2,644	0	756	304	705	614	180	14	71
New England C. of Optometry	2,154	0	0	0	0	2,154	0	0	0
Northeastern U.	38,540	14,811	8,969	13	2,372	7,788	1,969	2,618	0
Simmons C.	872	0	154	0	0	19	0	699	0
Smith C.	1,827	136	85	332	61	696	53	359	105
Tufts U.	109,291	7,334	2,964	1,020	1,284	84,507	4,133	8,049	0
Wellesley C.	5,498e	0e	596e	24e	112e	820e	15e	585e	3,346e
Wentworth Institute of Technology	24	24	0	0	0	0	0	0	0
Williams C.	2,961	1,104 i	516 i	74 i	244 i	655 i	51 i	199 i	118 i
Woods Hole Oceanographic Institution	99,964	22,404	0	77,560	0	0	0	0	0
Worcester Polytechnic Institute	10,493	8,319	730	0	1,154	248	0	42	0
Michigan, total	1,233,076	224,264	97,913	12,824	27,113	717,283	22,301	128,778	2,600
Public, total	1,226,860	222,008	96,425	12,767	26,608	716,451	22,258	128,198	2,145
Central MI U.	2,252	150	744	170	119	627	266	176	0
Eastern MI U.	3,164	462	349	54	97	1,678	182	342	0
Ferris State U.	64e	0e	0e	0e	0e	64e	0e	0e	0e
Grand Valley State U.	2,374	0	45	1,956	0	271	6	96	0
MI State U.	289,787	23,870	47,401	2,145	7,074	179,521	5,983	23,383	410
MI Technological U.	30,005	19,625	1,551	1,048	1,169	5,893	0	321	398

See explanatory information and SOURCE at end of table.

TABLE B-31. R&D expenditures at universities and colleges, by State, control, and science and engineering field: fiscal year 2002

(Dollars in thousands)

State, control, and institution	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
Michigan, continued:									
Public, continued:									
Oakland U.	6,869	2,796	931	0	311	2,812	6	13	0
Saginaw Valley State U.	591	5	37	190	153	107	14	17	68
U. MI all campuses	673,724	159,890	27,653	5,524	11,553	364,265	12,259	92,279	301
Wayne State U.	199,007	11,734	16,058	101	1,560	159,013	2,960	6,684	897
Western MI U.	19,023	3,476	1,656	1,579	4,572	2,200	582	4,887	71
Private, total	6,216	2,256	1,488	57	505	832	43	580	455
Andrews U.	597	5	98	0	29	106	1	358	0
Calvin C.	1,509	177	436	49	215	370	40	222	0
Hope C.	1,514	107	524	8	261	356	0	0	258
Kettering U.	1,311	1,311	0	0	0	0	0	0	0
Lawrence Technological U.	539	539	0	0	0	0	0	0	0
U. Detroit Mercy	746	117	430	0	0	0	2	0	197
Minnesota, total	504,257	48,398	25,723	13,168	16,242	374,561	9,837	16,162	166
Public, total	497,800	48,395	23,079	12,581	15,739	372,770	9,774	15,311	151
MN State U. Mankato	1,054	63	31	315	37	451	6	0	151
St. Cloud State U.	2,481 i	979 i	434 i	211 i	369 i	150 i	0 i	338 i	0 i
U. MN all campuses	494,265	47,353	22,614	12,055	15,333	372,169	9,768	14,973	0
Private, total	6,457	3	2,644	587	503	1,791	63	851	15
Augsburg C.	655	0	354	176	125	0	0	0	0
Carleton C.	1,688	0	675	219	99	563	56	61	15
Macalester C.	3,024	0	1,244	192	271	650	5	662	0
St. Olaf C.	847	0	304	0	0	415	0	128	0
U. of St. Thomas (St. Paul, MN)	243	3	67	0	8	163	2	0	0
Mississippi, total	285,466	63,309	31,073	21,300	11,295	130,171	3,738	9,197	15,383
Public, total	284,459	63,309	30,796	21,300	11,074	129,662	3,738	9,197	15,383
Alcorn State U.	5,809	0	0	0	0	5,809	0	0	0
Jackson State U.	25,445	242	3,238	3,521	5,229	5,823	1,743	607	5,042
MS State U.	158,652	54,882	5,284	6,752	3,374	79,575	1,493	4,653	2,639
MS Valley State U.	1,030	13	291	63	554	109	0	0	0
U. MS all campuses	67,838 i	6,628	15,159	0	498	36,246 i	145	3,937	5,225
U. Southern MS	25,685	1,544	6,824	10,964	1,419	2,100	357	0	2,477
Private, total	1,007	0	277	0	221	509	0	0	0
Rust C.	0	0	0	0	0	0	0	0	0
Tougaloo C.	1,007 i	0 i	277 i	0 i	221 i	509 i	0 i	0 i	0 i
Missouri, total	705,593	54,236	24,194	10,796	9,771	572,004	10,302	22,485	1,805
Public, total	250,619	45,962	11,587	5,134	2,777	160,527	7,192	16,621	819
Lincoln U. (Jefferson City, MO)	3,291	0	0	0	0	3,291	0	0	0
Southeast MO State U.	141	0	22	8	0	106	0	0	5
Southwest MO State U.	1,888	108	175	450	30	1,058	21	46	0
Truman State U.	487	0 i	32 i	0 i	6 i	37 i	0 i	0 i	412 i
U. MO system administration	0	0	0	0	0	0	0	0	0
U. MO-Columbia	177,011	19,736	4,468	2,233	1,251	132,161	4,506	12,254	402
U. MO-Kansas City	24,060	312	1,176	371	788	19,453	1,336	624	0
U. MO-Rolla	32,222	25,806	3,852	2,072	146	342	3	1	0
U. MO-St. Louis	11,519	0	1,862	0	556	4,079	1,326	3,696	0
Private, total	454,974	8,274	12,607	5,662	6,994	411,477	3,110	5,864	986
Forest Institute of Professional Psychology	0	0	0	0	0	0	0	0	0
Kirksville C. of Osteopathic Medicine	1,134	0	0	0	0	1,134	0	0	0

See explanatory information and SOURCE at end of table.

TABLE B-31. R&D expenditures at universities and colleges, by State, control, and science and engineering field: fiscal year 2002

(Dollars in thousands)

State, control, and institution	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
Missouri, continued:									
Private, continued:									
St. Louis U. all campuses	35,444	18	51	691	260	34,241	71	1	111
U. of Health Sciences	1,436	0	0	0	0	1,436	0	0	0
Washington U. St. Louis	416,960	8,256	12,556	4,971	6,734	374,666	3,039	5,863	875
Montana, total	122,375	11,536	14,696	4,173	1,209	74,309	155	7,512	8,785
Public, total	122,375	11,536	14,696	4,173	1,209	74,309	155	7,512	8,785
MT State U.-Bozeman	78,211	9,921	12,798	824	306	47,193	0	2,761	4,408
MT Tech of The U. MT	4,797	1,615	119	2,789	0	208	0	66	0
U. MT, The	39,367	0	1,779	560	903	26,908	155	4,685	4,377
Nebraska, total	266,930	27,931	13,076	7,606	7,244	174,950	7,175	13,143	15,805
Public, total	247,948	27,931	12,902	7,511	7,244	156,246	7,175	13,134	15,805
U. NE Medical Ctr.	71,000	0	0	0	0	71,000	0	0	0
U. NE Kearney	297	0	48	58	0	173	3	3	12
U. NE Lincoln	171,431	26,482	12,230	7,415	6,284	84,711	6,724	11,792	15,793
U. NE Omaha	5,220	1,449	624	38	960	362	448	1,339	0
Private, total	18,982	0	174	95	0	18,704	0	9	0
Creighton U.	18,982	0	174	95	0	18,704	0	9	0
Nevada, total	126,713	14,549	9,549	43,952	2,180	37,932	975	3,501	14,075
Public, total	126,713	14,549	9,549	43,952	2,180	37,932	975	3,501	14,075
Desert Research Institute	29,465	0	0	22,123	0	0	0	0	7,342
U. NV, Las Vegas	30,527	4,899 i	4,180 i	14,920 i	1,224 i	3,311 i	162 i	1,829 i	2 i
U. NV, Reno	66,721	9,650	5,369	6,909	956	34,621	813	1,672	6,731
New Hampshire, total	220,061	35,388	7,056	39,731	6,015	111,534	6,818	5,211	8,308
Public, total	93,222	17,062	3,077	38,664	672	24,591	950	4,541	3,665
U. NH	93,222	17,062	3,077	38,664	672	24,591	950	4,541	3,665
Private, total	126,839	18,326	3,979	1,067	5,343	86,943	5,868	670	4,643
Dartmouth C.	126,839	18,326	3,979	1,067	5,343	86,943	5,868	670	4,643
New Jersey, total	682,928	124,457	67,310	45,895	33,563	327,467	15,447	52,416	16,373
Public, total	502,251	68,521	37,205	27,803	21,989	297,221	9,967	23,814	15,731
C. NJ, The	2,686	128	154	0	535	305	284	278	1,002
Montclair State U.	889	0	32	300	236	270	51	0	0
NJ City U.	267	0	162	0	0	0	105	0	0
NJ Institute of Technology	61,424	33,393	5,434	2,224	7,122	0	0	248	13,003
Rutgers The State U. NJ, all campuses	258,829	35,000	31,423	25,279	14,096	118,490	9,527	23,288	1,726
U. of Medicine and Dentistry NJ	178,156	0	0	0	0	178,156	0	0	0
Private, total	180,677	55,936	30,105	18,092	11,574	30,246	5,480	28,602	642
Fairleigh Dickinson U. all campuses	190	0 i	0 i	1 i	0 i	45 i	10 i	78 i	56 i
Monmouth U.	85	0	69	0	0	16	0	0	0
Princeton U.	164,408	48,947	28,122	15,508	10,896	29,180	5,404	26,351	0
Rider U.	939	0	40	16	0	231	66	0	586
Seton Hall U.	1,200	0	426	0	0	774	0	0	0
Stevens Institute of Technology	13,855e	6,989 i	1,448 i	2,567 i	678 i	0 i	0 i	2,173 i	0 i

See explanatory information and SOURCE at end of table.

TABLE B-31. R&D expenditures at universities and colleges, by State, control, and science and engineering field: fiscal year 2002

(Dollars in thousands)

State, control, and institution	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
New Mexico, total	292,691	104,540	22,072	13,463	5,734	100,183	11,128	8,682	26,889
Public, total	292,691	104,540	22,072	13,463	5,734	100,183	11,128	8,682	26,889
NM Highlands U.	2,706	263	891	0	0	1,039	93	17	403
NM Institute of Mining and Technology	36,309	16,674	2,792	9,004	86	3,104	36	0	4,613
NM State U. all campuses	103,078	61,590	10,224	2,442	1,964	23,139	1,626	1,488	605
U. NM all campuses	150,598	26,013	8,165	2,017	3,684	72,901	9,373	7,177	21,268
New York, total	2,774,152	295,080	207,125	102,941	104,088	1,899,855	67,973	78,847	18,243
Public, total	673,234	87,794	65,319	37,687	30,672	399,894	22,928	27,445	1,495
CUNY Baruch C.	762	0	109	55	31	1	156	324	86
CUNY Brooklyn C.	6,217	0	1,293	199	914	1,178	1,656	977	0
CUNY City C.	17,103	3,510	6,205	689	1,077	4,697	567	358	0
CUNY C. Staten Island	1,944	0	1,031	32	108	628	83	62	0
CUNY Graduate Ctr.	2,391	0	19	0	854	0	962	250	306
CUNY Herbert H. Lehman C.	2,955	0	92	8	316	1,547	975	14	3
CUNY Hunter C.	25,905	0	5,671	3,697	247	9,870	4,141	2,107	172
CUNY John Jay C. of Criminal Justice	844	45	17	11	31	1	36	126	577
CUNY Medgar Evers C.	992	0	413	126	363	57	0	5	28
CUNY Queens C.	6,718	0	1,084	184	314	4,486	381	269	0
CUNY York C.	1,664	0	202	1	0	1,449	0	12	0
SUNY Albany	67,493	10,149	2,257	5,693	1,495	35,182	1,885	10,832	0
SUNY Binghamton	21,343	7,935	2,406	824	912	2,391	3,233	3,447	195
SUNY Buffalo all campuses	239,735	37,954	13,633	961	10,333	168,664	3,964	4,098	128
SUNY C. Brockport	819 i	0 i	43 i	145 i	18 i	607 i	0 i	6 i	0 i
SUNY C. Buffalo	1,969	0	32	971	0	49	310	607	0
SUNY C. Cortland	353	0	156	75	0	98	0	24	0
SUNY C. Fredonia	235	0	125	21	0	55	0	34	0
SUNY C. Geneseo	682	0	351	4	79	150	94	4	0
SUNY C. Old Westbury	1,214	0	324	0	33	805	0	52	0
SUNY C. Oswego	1,112	0	3	99	317	1	623	69	0
SUNY C. Plattsburgh	1,061	0	559	457	3	6	11	25	0
SUNY C. of Environmental Science & Forestry	26,337	9,078 i	2,101 i	2,603 i	0 i	12,292 i	0 i	263 i	0 i
SUNY C. of Optometry	1,750	0	0	0	0	1,750	0	0	0
SUNY Health Science Ctr. Brooklyn	34,981 i	0 i	0 i	0 i	0 i	34,981 i	0 i	0 i	0 i
SUNY Purchase C.	284	0	122	88	0	74	0	0	0
SUNY Stony Brook all campuses	184,045	19,123	27,071	20,744	13,227	96,549	3,851	3,480	0
SUNY Upstate Medical U.	22,326	0	0	0	0	22,326	0	0	0
Private, total	2,100,918	207,286	141,806	65,254	73,416	1,499,961	45,045	51,402	16,748
Adelphi U.	152 i	0 i	36 i	0 i	23 i	92 i	1 i	0 i	0 i
Albany C. of Pharmacy	906	0	0	0	0	906	0	0	0
Albany Medical C.	13,104	0	0	0	0	13,104	0	0	0
Alfred U. all campuses	6,916	6,916	0	0	0	0	0	0	0
Barnard C.	1,064	0	210	3	25	359	450	17	0
Clarkson U.	8,322e	6,642e	1,373e	0e	162e	113e	32e	0e	0e
Colgate U.	1,544	0	455	326	199	251	254	59	0
Columbia U. in the City of New York	405,403	19,666	32,054	52,455	9,505	280,697	3,098	7,158	770
Cooper Union	427	427	0	0	0	0	0	0	0
Cornell U. all campuses	496,123	56,309	66,273	6,117	26,015	314,857	7,055	19,497	0
Fordham U.	3,793	0	6	2	52	1,512	1,526	695	0
Hamilton C.	1,821	0	959	312	0	128	204	218	0
Hofstra U.	661e	424e	5e	0e	0e	232e	0e	0e	0e

See explanatory information and SOURCE at end of table.

TABLE B-31. R&D expenditures at universities and colleges, by State, control, and science and engineering field: fiscal year 2002

(Dollars in thousands)

State, control, and institution	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
New York, continued:									
Private, continued:									
Iona C.	177	0	32	0	107	38	0	0	0
Ithaca C.	2,513	0	68	0	1,632	782	21	10	0
Long Island U. all campuses	1,477	0	153	121	14	744	376	69	0
Manhattan C.	257	257	0	0	0	0	0	0	0
Mt. Sinai School of Medicine	185,335	0	0	0	0	185,335	0	0	0
New School U.	5,791e	0e	0e	0e	0e	719e	46e	5,026e	0e
NY Institute of Technology, all campuses	380	8	0	0	27	345	0	0	0
NY Medical C.	25,222	0	0	0	0	25,222	0	0	0
NY U.	222,978	0	6,494	729	14,360	177,019	14,629	8,029	1,718
Pace U. all campuses	425	38	0	26	6	315	0	0	40
Polytechnic U.	10,915	9,479	0	0	1,412	0	0	24	0
Rensselaer Polytechnic Institute	45,955	34,241	5,332	2,306	3,297	779	0	0	0
Rochester Institute of Technology	13,500	5,601	5,168	829	233	1,580	7	82	0
Rockefeller U.	166,603	0	5,439	0	5,411	155,753	0	0	0
Skidmore C.	519	0	30	0	95	275	15	104	0
St. John's U. (Jamaica, NY)	1,315 i	0 i	0 i	10 i	5 i	997 i	287 i	16 i	0 i
Syracuse U. all campuses	45,870	10,485	4,863	1,116	7,172	2,961	1,978	4,212	13,083
Teachers C. Columbia U.	10,409	0	0	0	333	1,470	3,301	5,305	0
Union C. (Schenectady, NY)	2,316	601	131	150	270	687	28	387	62
U. Rochester	261,601	56,192	12,725	752	3,061	175,565	11,737	494	1,075
Yeshiva U.	157,124	0	0	0	0	157,124	0	0	0
North Carolina, total	1,276,655	108,608	61,487	49,278	34,680	930,581	10,294	73,607	8,120
Public, total	722,577	89,355	42,691	39,853	27,983	454,180	6,501	54,688	7,326
Appalachian State U.	781	0	213	217	82	155	1	113	0
East Carolina U.	11,513	1	199	379	187	10,040	21	536	150
Elizabeth City State U.	1,058	346	0	22	616	74	0	0	0
Fayetteville State U.	311	0	0	0	0	286	25	0	0
NC Agricultural and Technical State U.	15,353	8,240	689	0	183	5,863	4	374	0
NC Central U.	1,035 i	0 i	266 i	0 i	0 i	679 i	0 i	90 i	0 i
NC State U.	290,018	76,609	20,267	16,842	15,328	148,461	0	8,604	3,907
U. NC Asheville	1,232	16	305	606	108	8	0	189	0
U. NC Chapel Hill	370,806	0	18,616	15,402	10,039	277,423	5,584	43,742	0
U. NC Charlotte	8,773	4,143	802	196	1,262	2,064	71	202	33
U. NC Greensboro	4,454	0	355	0	42	2,891	672	494	0
U. NC Wilmington	14,568	0	480	5,922	12	4,594	120	210	3,230
Western Carolina U.	653	0	152	267	19	75	0	134	6
Winston-Salem State U.	2,022	0	347	0	105	1,567	3	0	0
Private, total	554,078	19,253	18,796	9,425	6,697	476,401	3,793	18,919	794
Bennett C.	811 i	0 i	151 i	0 i	50 i	264 i	10 i	150 i	186 i
Duke U.	441,533	19,253	16,837	9,425	6,423	367,043	3,783	18,769	0
Johnson C. Smith U.	0	0	0	0	0	0	0	0	0
Shaw U.	100 i	0 i	0 i	0 i	0 i	100 i	0 i	0 i	0 i
Wake Forest U.	111,634	0	1,808	0	224	108,994	0	0	608
North Dakota, total	106,078	19,924	6,326	3,572	1,444	61,797	684	7,611	4,720
Public, total	106,078	19,924	6,326	3,572	1,444	61,797	684	7,611	4,720
ND State U. all campuses	72,105	2,634	5,292	249	1,211	51,677	665	7,538	2,839
U. ND all campuses	33,973	17,290	1,034	3,323	233	10,120	19	73	1,881

See explanatory information and SOURCE at end of table.

TABLE B-31. R&D expenditures at universities and colleges, by State, control, and science and engineering field: fiscal year 2002

(Dollars in thousands)

State, control, and institution	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
Ohio, total	1,116,957	250,506	82,280	17,165	41,918	624,055	16,336	55,105	29,592
Public, total	848,550	181,706	73,265	16,397	41,253	451,119	15,373	52,666	16,771
Air Force Institute of Technology	9,243	4,354	1,580	451	1,583	0	0	0	1,275
Bowling Green State U. all campuses	5,327	103	1,223	241	83	1,683	633	892	469
Central State U.	560 i	225 i	8 i	213 i	33 i	27 i	9 i	10 i	35 i
Cleveland State U.	13,855	4,265	1,451	582	42	1,351	65	5,212	887
Kent State U. all campuses	12,868	143	7,328	582	925	1,382	1,512	996	0
Medical C. OH	17,040	0	0	0	0	17,040	0	0	0
Miami U. all campuses	13,279	406 i	3,420 i	342 i	1 i	3,005 i	813 i	2,343 i	2,949 i
Northeastern OH Universities C. of Medicine	4,525	0	0	0	0	4,525	0	0	0
OH State U. all campuses	432,387	102,029	28,251	9,231	33,369	214,313	7,876	30,963	6,355
OH U. all campuses	36,601	18,248	5,543	1,169	118	7,717	1,759	1,087	960
U. Akron all campuses	28,080	8,100	10,236	574	597	1,365	110	7,098	0
U. Cincinnati all campuses	217,739	26,701	5,872	360	539	176,777	1,063	3,206	3,221
U. Toledo	24,825	12,463	5,418	2,228	31	3,619	206	518	342
Wright State U. all campuses	30,962	4,634	2,011	424	3,932	18,170	1,327	340	124
Youngstown State U.	1,259	35	924	0	0	145	0	1	154
Private, total	268,407	68,800	9,015	768	665	172,936	963	2,439	12,821
Antioch U. all campuses	0	0	0	0	0	0	0	0	0
Case Western Reserve U.	219,042	24,133	6,600	433	373	171,688	604	2,396	12,815
C. Wooster	362	0	282	44	1	26	9	0	0
Denison U.	373	0	155	22	0	135	12	43	6
John Carroll U.	823	0	588	0	68	167	0	0	0
Oberlin C.	439	0	97	70	1	206	65	0	0
OH Wesleyan U.	284	0	74	0	0	182	28	0	0
Union Institute, The	0	0	0	0	0	0	0	0	0
U. Dayton	46,554	44,387	1,219	199	97	407	245	0	0
U. Findlay, The	250	0	0	0	125	125	0	0	0
Wilberforce U.	280 i	280 i	0 i	0 i	0 i	0 i	0 i	0 i	0 i
Oklahoma, total	282,062	42,820	25,503	35,662	6,392	131,283	13,694	25,123	1,585
Public, total	270,459	35,231	23,844	35,330	5,155	130,720	13,538	25,056	1,585
Langston U.	3,975	0	0	0	0	3,975	0	0	0
Northeastern State U.	1,314	0	23	0	69	1,153	0	69	0
OK State U. all campuses	94,987	18,295	5,930	1,831	1,067	54,332	495	11,652	1,385
U. Central OK	810	35	128	0	368	79	0	0	200
U. OK all campuses	169,373	16,901	17,763	33,499	3,651	71,181	13,043	13,335	0
Private, total	11,603	7,589	1,659	332	1,237	563	156	67	0
U. Tulsa	11,603	7,589	1,659	332	1,237	563	156	67	0
Oregon, total	386,666	23,610	15,338	38,495	8,752	270,137	15,775	13,563	996
Public, total	383,878	23,455	14,384	38,412	8,613	268,828	15,735	13,455	996
Eastern OR U.	398	0	241	12	23	24	62	36	0
OR Health Sciences U.	158,729	0e	0e	0e	0e	152,379e	6,350e	0e	0e
OR Institute of Technology	1,025	543	0	44	438	0	0	0	0
OR State U.	161,735	20,797	4,300	34,844	3,285	94,684	81	2,748	996
Portland State U.	17,683	1,939	1,011	1,933	2,224	2,398	394	7,784	0
Southern OR U.	585	0	139	1	0	396	0	49	0
U. OR	43,723	176	8,693	1,578	2,643	18,947	8,848	2,838	0

See explanatory information and SOURCE at end of table.

TABLE B-31. R&D expenditures at universities and colleges, by State, control, and science and engineering field: fiscal year 2002

(Dollars in thousands)

State, control, and institution	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
Oregon, continued:									
Private, total	2,788	155	954	83	139	1,309	40	108	0
Lewis and Clark C.	593	0	219	23	133	188	10	20	0
Pacific U.	157	0	107	50	0	0	0	0	0
Reed C.	1,145	0	524	0	0	564	30	27	0
U. Portland	639	155	44	0	6	373	0	61	0
Willamette U.	254	0	60	10	0	184	0	0	0
Pennsylvania, total	1,912,760	341,080	125,569	32,723	137,043	1,135,023	43,066	88,069	10,187
Public, total	959,567	213,844	78,319	28,628	16,601	549,073	28,788	42,435	1,879
East Stroudsburg U. PA	151	0	0	0	0	151	0	0	0
Indiana U. PA all campuses	794	15	104	144	4	175	3	323	26
Lincoln U. (Lincoln University, PA)	718	0	398	0	0	254	0	0	66
PA State U. all campuses	492,739	193,590	56,959	27,679	11,105	163,590	12,634	25,408	1,774
Temple U.	63,850	2,801	7,033	186	881	39,678	10,482	2,789	0
U. Pittsburgh all campuses	400,200	17,438	13,707	609	4,610	344,239	5,669	13,915	13
West Chester U. PA	1,115	0	118	10	1	986	0	0	0
Private, total	953,193	127,236	47,250	4,095	120,442	585,950	14,278	45,634	8,308
Allegheny C.	1,306	0	420	370	4	169	132	0	211
Bryn Mawr C.	3,502	0	1,556	284	390	143	702	427	0
Bucknell U.	1,900	1,301	319	75	12	141	48	4	0
Carnegie-Mellon U.	188,191	47,609	11,263	861	103,196	7,859	7,016	9,569	818
Dickinson C.	1,475	0	589	210	215	251	85	125	0
Drexel U.	44,465	37,966	2,484	138	3,152	720	0	5	0
Duquesne U.	5,955	0	1,440	0	92	4,354	0	69	0
Franklin and Marshall C.	989	0	268	192	3	347	127	52	0
Haverford C.	1,215	0	553	0	43	518	84	17	0
Juniata C.	283	0	33	42	0	113	0	0	95
La Salle U.	20	0	0	0	2	0	3	15	0
Lafayette C.	1,344	303	96	64	49	117	40	35	640
Lehigh U.	22,687	17,726	3,017	882	65	951	39	7	0
MCP Hahnemann U.	37,945	0	0	0	0	37,323	622	0	0
PA C. of Optometry	992	0	0	0	0	992	0	0	0
Philadelphia C. of Osteopathic Medicine	891	0	0	0	0	891	0	0	0
St. Joseph's U.	2,703	0	35	0	112	361	1,742	453	0
Swarthmore C.	1,574	174	682	0	311	158	10	231	8
Thomas Jefferson U.	102,974	0	0	0	0	102,974	0	0	0
U. PA	522,269	18,291	23,609	775	12,434	422,686	3,504	34,590	6,380
U. Scranton	3,873	0	358	0	13	3,502	0	0	0
U. of the Sciences in Philadelphia	833	0	0	0	0	833	0	0	0
Villanova U.	5,481e	3,866e	528e	150e	316e	462e	124e	35	0
Widener U. all campuses	231 i	0 i	0 i	42 i	33 i	0 i	0 i	0 i	156 i
Wilkes U.	95	0	0	10	0	85	0	0	0
Rhode Island, total	163,052	20,177	10,043	29,552	13,932	68,933	8,429	6,685	5,301
Public, total	53,347	5,341	606	23,869	170	12,207	5,391	462	5,301
U. RI	53,347	5,341	606	23,869	170	12,207	5,391	462	5,301
Private, total	109,705	14,836	9,437	5,683	13,762	56,726	3,038	6,223	0
Brown U.	109,482	14,836	9,427	5,683	13,762	56,523	3,028	6,223	0
Providence C.	223	0	10	0	0	203	10	0	0

See explanatory information and SOURCE at end of table.

TABLE B-31. R&D expenditures at universities and colleges, by State, control, and science and engineering field: fiscal year 2002

(Dollars in thousands)

State, control, and institution	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
South Carolina, total	399,982	81,108	35,382	22,998	6,459	218,210	3,891	18,042	13,892
Public, total	397,304	81,108	34,573	22,679	6,331	217,028	3,665	18,028	13,892
Clemson U.	134,840	52,744	8,333	34	3,762	50,676	493	7,001	11,797
Coastal Carolina U.	1,100	0	56	778	0	237	0	0	29
C. Charleston	3,295	0	724	1,570	251	241	70	439	0
Medical U. SC	132,030	0	0	0	0	132,030	0	0	0
SC State U.	2,931	50 i	1,406 i	0 i	0 i	644 i	0 i	831 i	0 i
U. SC all campuses	123,108	28,314	24,054	20,297	2,318	33,200	3,102	9,757	2,066
Private, total	2,678	0	809	319	128	1,182	226	14	0
Benedict C.	1,061	0	103	8	50	900	0	0	0
Claflin C.	203	0	0	0	0	203	0	0	0
Furman U.	1,414	0	706	311	78	79	226	14	0
South Dakota, total	38,449	7,128	1,944	4,218	337	21,023	180	2,992	627
Public, total	38,145	7,128	1,914	4,218	216	20,871	180	2,991	627
SD School of Mines and Technology	9,692	5,657	98	3,386	4	0	0	0	547
SD State U.	20,085	1,471	469	813	13	15,692	0	1,627	0
U. SD	8,368	0	1,347	19	199	5,179	180	1,364	80
Private, total	304	0	30	0	121	152	0	1	0
Augustana C. (Sioux Falls, SD)	304	0	30	0	121	152	0	1	0
Tennessee, total	490,994	70,008	27,158	10,499	13,420	315,183	17,405	26,049	11,272
Public, total	259,151	52,147	13,440	10,327	12,472	132,550	11,465	19,345	7,405
East TN State U.	11,701	146	95	84	111	5,626	8	5,142	489
Middle TN State U.	479	13	83	29	70	138	34	112	0
TN State U.	15,262	5,115	1,058	0	679	7,609	133	668	0
TN Technological U.	9,823	8,477	390	9	22	903	17	5	0
U. Memphis, The	33,625	3,611	1,411	4,340	1,602	4,018	11,084	6,370	1,189
U. TN Chattanooga	1,966	329	212	0	387	307	3	377	351
U. TN Martin	1,123	0	0	0	0	0	0	0	1,123
U. TN system office	185,172	34,456	10,191	5,865	9,601	113,949	186	6,671	4,253
Private, total	231,843	17,861	13,718	172	948	182,633	5,940	6,704	3,867
Fisk U.	3,030	0	3,030	0	0	0	0	0	0
Le Moyne-Owen C.	0	0	0	0	0	0	0	0	0
Meharry Medical C.	20,508	0	0	0	0	20,508	0	0	0
Vanderbilt U.	208,305	17,861	10,688	172	948	162,125	5,940	6,704	3,867
Texas, total	2,535,237	364,283	162,881	147,278	101,402	1,685,804	23,322	40,947	9,320
Public, total	2,057,020	350,055	143,278	143,907	87,724	1,265,417	19,530	39,408	7,701
Lamar U.	4,030	1,454	149	1,935	32	7	0	0	453
Prairie View A&M U.	10,444	3,139	615	0	968	5,719	0	3	0
Sam Houston State U.	2,976	0	86	1,097	109	468	3	1,213	0
Southwest TX State U.	8,109	45	3,480	144	1,268	1,925	1	1,131	115
Stephen F. Austin State U.	5,582	0	0	18	12	4,584	0	934	34
Sul Ross State U.	767	0	0	78	65	300	0	324	0
Tarleton State U.	7,871	0	2	4,103	67	3,698	0	1	0
TX A&M U. all campuses	436,681	142,887	29,238	81,950	13,689	155,557	3,078	7,510	2,772
TX A&M U. Commerce	263	0	99	3	17	139	0	5	0
TX A&M U. Corpus Christi	9,124	2,816	923	3,094	1,342	851	0	21	77
TX A&M U. Kingsville	8,208	660	106	882	0	6,404	0	0	156
TX A&M U. System Health Science Ctr.	49,636	392	0	135	0	49,014	95	0	0
TX Southern U.	4,189	33	263	0	23	3,587	0	0	283
TX Tech U.	82,785	18,477	8,644	10,489	1,985	36,628	222	5,738	602
TX Woman's U.	2,822	0	34	0	9	2,725	0	54	0

See explanatory information and SOURCE at end of table.

TABLE B-31. R&D expenditures at universities and colleges, by State, control, and science and engineering field: fiscal year 2002

(Dollars in thousands)

State, control, and institution	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
Texas, continued:									
Public, continued:									
U. Houston	59,707	22,111	6,260	1,192	6,148	11,957	8,457	3,582	0
U. Houston-Clear Lake	8,362	7,137	156	253	484	250	67	0	15
U. Houston-Downtown	1,054	0	252	0	692	24	0	7	79
U. North TX	13,227	1,655	3,254	1,365	867	2,116	1,205	2,765	0
U. North TX Health Science Ctr. Ft. Worth	12,893	0	0	0	0	12,893	0	0	0
U. TX Arlington	15,097	9,448	3,336	145	416	1,005	211	536	0
U. TX Austin	320,966	118,167	73,665	27,396	44,158	39,495	5,350	11,470	1,265
U. TX Dallas	26,198	5,587	4,785	3,801	3,070	6,029	153	929	1,844
U. TX El Paso	23,684	9,059	2,259	5,268	938	4,960	590	610	0
U. TX Health Science Ctr. San Antonio	129,616	0	0	0	0	129,616	0	0	0
U. TX Houston Health Science Ctr.	138,380	0	0	0	0	138,380	0	0	0
U. TX M. D. Anderson Cancer Ctr.	262,145	0	4,936	0	10,347	246,862	0	0	0
U. TX Medical Branch Galveston	129,534	2,346	0	0	0	127,188	0	0	0
U. TX San Antonio	11,115	495	530	414	909	6,284	97	2,386	0
U. TX Southwestern Medical Ctr. Dallas	263,958	0	0	0	0	263,958	0	0	0
U. TX-Pan American	2,336	717	175	55	104	1,095	1	189	0
West TX A&M U.	5,261	3,430	31	90	5	1,699	0	0	6
Private, total	478,217	14,228	19,603	3,371	13,678	420,387	3,792	1,539	1,619
Abilene Christian U.	254	0	235	0	0	15	4	0	0
Baylor C. of Medicine	411,924	0	0	0	0	411,924	0	0	0
Baylor U.	3,868	73	1,689	407	172	235	178	104	1,010
Jarvis Christian C.	30	0	20	0	0	10	0	0	0
Rice U.	48,169	11,401	14,885	1,112	12,258	6,768	877	868	0
Southern Methodist U.	9,774	2,583	1,650	1,769	1,175	1,167	574	540	316
St. Mary's U. (San Antonio, TX)	293	0	0	0	0	0	0	0	293
TX Christian U.	3,300	171	813	62	3	84	2,147	20	0
Trinity U.	474	0	231	21	28	182	12	0	0
U. Dallas	116	0	65	0	42	2	0	7	0
Wiley C.	15	0	15	0	0	0	0	0	0
Utah, total	359,556	89,998	23,907	15,083	24,136	186,433	5,421	7,116	7,462
Public, total	338,328	81,873	20,191	14,901	22,435	181,967	4,645	5,213	7,103
U. UT	216,707	26,349	15,847	5,097	20,878	144,575	2,347	1,614	0
UT State U.	121,621	55,524	4,344	9,804	1,557	37,392	2,298	3,599	7,103
Private, total	21,228	8,125	3,716	182	1,701	4,466	776	1,903	359
Brigham Young U. all campuses	21,228	8,125	3,716	182	1,701	4,466	776	1,903	359
Vermont, total	90,189	2,095	2,367	562	1,155	80,564	974	154	2,318
Public, total	88,602	2,072	1,505	472	1,155	79,952	974	154	2,318
U. VT	88,602	2,072	1,505	472	1,155	79,952	974	154	2,318
Private, total	1,587	23	862	90	0	612	0	0	0
Middlebury C.	1,587	23	862	90	0	612	0	0	0

See explanatory information and SOURCE at end of table.

TABLE B-31. R&D expenditures at universities and colleges, by State, control, and science and engineering field: fiscal year 2002

(Dollars in thousands)

State, control, and institution	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
Virginia, total	693,606	147,215	56,479	58,277	23,786	369,234	15,082	22,994	539
Public, total	648,684	144,446	47,988	55,319	23,066	339,774	14,834	22,820	437
C. of William and Mary all campuses	39,858	0	7,603	26,493	1,366	2,394	430	1,572	0
George Mason U.	38,849	9,118	379	6,479	6,098	6,278	2,143	8,354	0
James Madison U.	2,867	17	746	0	984	879	107	116	18
Norfolk State U.	4,967	290	4,112	0	550	1	0	14	0
Old Dominion U.	29,223	15,547	2,304	3,847	1,631	3,347	1,399	1,148	0
Radford U.	562	0	0	186	5	35	10	46	280
U. VA all campuses	182,340	28,866	14,173	4,441	5,393	123,266	5,070	992	139
VA Commonwealth U.	109,619	3,749	5,064	348	292	95,536	3,214	1,416	0
VA Military Institute	695	602	68	0	5	15	0	5	0
VA Polytechnic Institute & State U.	232,560	86,257	12,830	13,525	6,742	101,588	2,461	9,157	0
VA State U.	7,144	0	709	0	0	6,435	0	0	0
Private, total	44,922	2,769	8,491	2,958	720	29,460	248	174	102
Eastern VA Medical School	28,572	0	0	0	0	28,572	0	0	0
Hampton U.	11,067	410	7,147	2,919	453	87	0	51	0
Institute of Textile Technology	2,826	2,321	350	0	155	0	0	0	0
U. Richmond	1,786	0	824	0	69	530	205	59	99
VA Union U.	671 i	38 i	170 i	39 i	43 i	271 i	43 i	64 i	3 i
Washington, total	748,493	76,632	35,518	78,108	12,610	509,282	9,671	25,610	1,062
Public, total	748,215	76,632	35,487	77,963	12,610	509,180	9,671	25,610	1,062
Central WA U.	1,738	0	130	564	386	382	39	237	0
Eastern WA U.	2,275	0	131	117	15	334	15	1,663	0
Evergreen State C.	441	0	36	0	0	351	0	0	54
U. WA	627,273	58,244	28,015	71,330	11,575	436,160	8,718	13,231	0
WA State U.	112,469	18,114	6,452	4,840	561	70,907	261	10,326	1,008
Western WA U.	4,019	274	723	1,112	73	1,046	638	153	0
Private, total	278	0	31	145	0	102	0	0	0
Whitman C.	278	0	31	145	0	102	0	0	0
West Virginia, total	96,870	28,633	4,656	5,794	537	53,500	324	1,511	1,915
Public, total	96,515	28,633	4,655	5,794	537	53,146	324	1,511	1,915
Bluefield State C.	0	0	0	0	0	0	0	0	0
Marshall U. Graduate C.	11,285	6,070	339	17	89	4,537	0	123	110
WV School of Osteopathic Medicine	182	0	0	0	0	182	0	0	0
WV State C.	63 i	0 i	8 i	0 i	0 i	55 i	0 i	0 i	0 i
WV U.	84,985	22,563	4,308	5,777	448	48,372	324	1,388	1,805
Private, total	355	0	1	0	0	354	0	0	0
Salem International U.	355e	0e	1e	0e	0e	354e	0e	0e	0e
Wisconsin, total	805,813	98,211	57,577	40,486	17,821	515,384	25,635	46,204	4,495
Public, total	696,807	93,988	56,492	40,486	17,667	415,854	25,510	45,177	1,633
U. WI Eau Claire	839	0	531	32	78	151	42	5	0
U. WI Green Bay	900	0	0	733	0	27	0	25	115
U. WI La Crosse	1,939	0	165	0	132	469	8	964	201
U. WI Madison	662,101	89,683	50,449	34,220	15,674	410,300	24,743	36,982	50
U. WI Milwaukee	24,933	4,296	4,988	4,008	1,680	2,509	481	6,960	11
U. WI Oshkosh	662	0	166	68	15	196	51	42	124
U. WI Parkside	769	0	53	32	0	495	131	4	54
U. WI River Falls	332	0	70	0	0	243	1	18	0
U. WI Stevens Point	1,849	9	26	565	0	1,214	2	33	0

See explanatory information and SOURCE at end of table.

TABLE B-31. R&D expenditures at universities and colleges, by State, control, and science and engineering field: fiscal year 2002

(Dollars in thousands)

State, control, and institution	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
Wisconsin, continued:									
Public, continued:									
U. WI Stout	1,358	0	9	0	70	149	50	2	1,078
U. WI Superior	889	0	17	828	0	19	1	24	0
U. WI Whitewater	236	0	18	0	18	82	0	118	0
Private, total	109,006	4,223	1,085	0	154	99,530	125	1,027	2,862
Marquette U.	9,807	2,239	1,045	0	154	2,375	125	1,007	2,862
Medical C. WI	96,700	0	0	0	0	96,700	0	0	0
Milwaukee School of Engineering	2,499	1,984	40	0	0	455	0	20	0
Wyoming, total	41,632	3,644	3,069	6,483	535	19,715	771	1,572	5,843
Public, total	41,632	3,644	3,069	6,483	535	19,715	771	1,572	5,843
U. WY	41,632e	3,644e	3,069e	6,483e	535e	19,715e	771e	1,572e	5,843e
Guam, total	4,571	57	0	1,511	0	2,914	0	89	0
Public, total	4,571	57	0	1,511	0	2,914	0	89	0
U. GU	4,571	57	0	1,511	0	2,914	0	89	0
Puerto Rico, total	70,286	9,947	4,195	6,768	815	44,403	1,172	2,986	0
Public, total	58,764	9,947	4,155	6,768	815	32,921	1,172	2,986	0
U. PR Mayaguez Campus	19,939	9,523	2,635	4,763	657	1,515	0	846	0
U. PR Medical Sciences Campus	29,089	0	0	0	0	29,089	0	0	0
U. PR Rio Piedras Campus	9,736	424	1,520	2,005	158	2,317	1,172	2,140	0
Private, total	11,522	0	40	0	0	11,482	0	0	0
Ponce School of Medicine	4,365	0	0	0	0	4,365	0	0	0
Pontifical Catholic U. PR, The	54	0	40	0	0	14	0	0	0
Universidad Central Del Caribe	7,103	0	0	0	0	7,103	0	0	0
Virgin Islands, total	13,981	0	714	1,050	1,930	10,064	0	223	0
Public, total	13,981	0	714	1,050	1,930	10,064	0	223	0
U. of the VI	13,981	0 i	714 i	1,050 i	1,930 i	10,064 i	0 i	223 i	0 i

-- = not available.
e = estimated.
i = imputed.

NOTES: Because of rounding, detail may not add to totals. Beginning in fiscal year 1998, this table reports data for all institutions. In prior years this table reported on doctorate-granting institutions only.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-32. Total R&D expenditures at universities and colleges, ranked by fiscal year 2002 total R&D expenditures: fiscal years 1995--2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
Total, all institutions	22,169,797	23,044,839	24,368,723	25,853,712	27,528,325	30,062,741	32,767,087	36,332,641
1 Johns Hopkins U., The [1]	788,687	798,468	829,241	853,620	874,518	901,156	999,246	1,140,235
2 U. CA Los Angeles	303,668	354,645	398,865	447,367	477,620	530,826	693,801	787,598
3 U. MI all campuses	443,070	468,876	483,485	496,761	508,619	551,556	600,523	673,724
4 U. WI Madison	403,541	412,570	419,810	443,695	499,688	554,361	604,143	662,101
5 U. WA	389,160	406,472	409,959	438,191	482,659	529,342	589,626	627,273
6 U. CA San Francisco	329,742	320,757	343,384	379,970	417,095	443,013	524,975	596,965
7 U. CA San Diego	357,333	371,509	376,655	418,790	461,632	518,559	556,533	585,008
8 Stanford U.	318,871	351,526	395,310	410,309	426,549	457,822	482,906	538,474
9 U. PA	272,393	288,430	296,141	333,477	383,569	430,389	469,852	522,269
10 Cornell U. all campuses [2]	343,786	339,534	351,030	363,511	395,552	410,393	443,828	496,123
Total, 1st 10 institutions	3,950,251	4,112,787	4,303,880	4,585,691	4,927,501	5,327,417	5,965,433	6,629,770
11 U. MN all campuses	336,524	341,179	363,095	360,323	371,384	411,380	462,011	494,265
12 PA State U. all campuses	330,881	337,938	339,955	362,643	379,402	427,575	458,066	492,739
13 U. CA Berkeley [2]	291,200	316,320	377,376	420,426	451,539	518,514	446,273	474,746
14 U. CA Davis	244,116	254,604	267,341	288,796	307,950	364,789	432,396	456,653
15 MA Institute of Technology [2]	370,800	380,612	410,930	413,098	420,306	426,299	435,495	455,491
16 Duke U.	218,703	242,235	251,536	282,388	348,274	356,625	375,133	441,533
17 TX A&M U. all campuses	362,539	366,983	366,798	393,720	402,203	397,268	407,041	436,681
18 OH State U. all campuses	246,287	262,147	289,100	301,518	322,810	361,399	390,652	432,387
19 U. IL Urbana-Champaign	246,174	268,995	286,470	329,266	358,247	373,024	390,863	427,174
20 Washington U. St. Louis	209,100	218,640	262,426	269,550	315,606	362,216	406,642	416,960
Total, 1st 20 institutions	6,806,575	7,102,440	7,518,907	8,007,419	8,605,222	9,326,506	10,170,005	11,158,399
21 Baylor C. of Medicine	190,375	184,613	192,744	216,528	272,198	334,175	381,461	411,924
22 Columbia U. in the City of New York	244,991	236,403	244,337	267,007	279,587	319,693	354,497	405,403
23 Harvard U.	276,422	282,443	299,961	306,100	326,193	341,810	372,107	401,367
24 U. Pittsburgh all campuses	186,457	189,826	202,533	213,842	249,477	294,809	348,792	400,200
25 U. CO all campuses	243,932	251,301	269,816	311,203	318,618	353,908	365,472	399,818
26 U. AZ	292,351	279,656	285,278	302,328	320,245	345,090	367,128	390,827
27 U. FL	199,216	255,099	272,373	274,862	304,447	313,692	347,892	386,316
28 U. Southern CA	222,159	244,258	259,246	268,806	280,741	300,445	340,597	372,397
29 U. NC Chapel Hill	209,118	208,529	221,380	235,296	252,767	269,072	303,576	370,806
30 Yale U.	231,819	234,901	245,536	262,680	274,050	296,706	321,514	354,243
Total, 1st 30 institutions	9,103,415	9,469,469	10,012,111	10,666,071	11,483,545	12,495,906	13,673,041	15,051,700
31 GA Institute of Technology all campuses	211,875	225,633	240,237	259,233	263,725	304,511	306,533	340,347
32 U. MD College Park	209,945	216,957	215,927	223,190	257,628	252,429	267,383	324,980
33 U. TX Austin	228,676	241,606	239,021	244,843	258,122	272,811	295,104	320,966
34 IN U. all campuses	145,512	154,260	165,198	171,754	194,790	227,737	259,899	299,080
35 NC State U.	180,191	190,748	229,292	254,254	270,621	277,946	299,259	290,018
36 MI State U.	182,009	182,589	190,178	193,611	207,912	238,436	265,946	289,787
37 U. IA	164,893	178,228	184,414	199,063	207,135	236,944	255,348	288,808
38 LA State U. all campuses	186,723	196,328	205,441	208,928	225,808	251,233	268,911	287,363
39 Purdue U. all campuses	203,419	206,951	206,588	216,479	226,411	234,536	254,917	285,778
40 U. GA	206,256	209,357	225,457	217,945	237,493	258,476	272,298	284,660
Total, 1st 40 institutions	11,022,914	11,472,126	12,113,864	12,855,371	13,833,190	15,050,965	16,418,639	18,063,487

See explanatory information and SOURCE at end of table.

TABLE B-32. Total R&D expenditures at universities and colleges, ranked by fiscal year 2002 total R&D expenditures: fiscal years 1995--2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
41 Northwestern U.	173,731	187,262	200,943	223,235	233,809	245,774	257,933	282,154
42 Emory U.	148,178	149,168	163,619	172,884	189,170	206,070	236,997	271,238
43 U. MD Baltimore	107,874	122,207	134,808	143,321	140,903	224,346	239,007	266,822
44 U. TX Southwestern Medical Ctr. Dallas	125,301	130,162	140,589	153,711	165,520	189,216	222,376	263,958
45 U. TX M. D. Anderson Cancer Ctr.	122,181	120,964	129,578	141,260	155,126	182,196	212,746	262,145
46 U. Rochester [2]	158,539	144,914	155,311	174,617	177,126	197,335	234,261	261,601
47 U. IL Chicago	119,381	121,540	139,296	151,739	175,093	195,839	233,098	259,852
48 Rutgers The State U. NJ all campuses	192,263	185,103	183,038	197,053	213,838	225,268	236,793	258,829
49 U. AL Birmingham, The	158,779	170,193	203,758	227,720	232,115	233,461	231,702	255,053
50 SUNY Buffalo all campuses	143,768	137,701	135,663	151,650	166,823	187,692	186,829	239,735
Total, 1st 50 institutions	12,472,909	12,941,340	13,700,467	14,592,561	15,682,713	17,138,162	18,710,381	20,684,874
51 U. KY all campuses	111,934	118,721	124,804	161,346	174,034	202,392	211,721	236,275
52 VA Polytechnic Institute & State U.	148,501	143,815	169,808	167,118	169,250	192,672	216,323	232,560
53 U. Chicago [2]	126,261	135,693	150,531	151,635	162,805	170,678	194,125	225,264
54 NY U.	148,935	145,874	153,288	156,452	167,179	182,205	190,722	222,978
55 CA Institute of Technology [2]	138,016	157,005	177,888	185,066	212,216	222,666	215,085	220,004
56 Case Western Reserve U.	141,089	143,435	161,825	176,330	182,332	193,057	198,253	219,042
57 U. Cincinnati all campuses	91,159	127,733	141,604	159,695	153,002	171,906	192,895	217,739
58 U. UT	105,642	114,423	135,911	142,956	153,843	187,661	197,597	216,707
59 U. CA Irvine	109,908	119,647	119,669	130,415	141,842	158,437	179,866	209,469
60 Vanderbilt U.	111,224	117,003	122,598	135,214	149,675	171,926	186,504	208,305
Total, 1st 60 institutions	13,705,578	14,264,689	15,158,393	16,158,788	17,348,891	18,991,762	20,693,472	22,893,217
61 Wayne State U.	106,140	112,151	124,383	138,456	146,832	156,814	175,984	199,007
62 U. South FL	92,758	94,157	99,649	104,325	123,961	145,397	171,550	197,894
63 Boston U.	103,709	110,266	120,392	130,054	141,102	154,029	172,031	192,612
64 IA State U. [2]	154,932	151,914	155,433	156,766	161,301	175,558	179,196	188,664
65 U. TN system	151,316	149,331	154,230	150,694	158,930	163,690	161,898	188,261
66 Carnegie-Mellon U. [2]	125,659	136,514	134,954	137,450	142,174	137,980	144,882	188,191
67 Mt. Sinai School of Medicine	92,008	92,405	94,776	109,448	127,765	149,846	176,946	185,335
68 SUNY Stony Brook all campuses	122,611	126,377	136,624	141,766	148,982	163,307	168,487	184,045
69 U. VA all campuses	136,679	97,334	114,085	139,135	131,138	140,416	149,547	182,340
70 CO State U.	122,172	126,701	128,580	140,179	150,281	152,279	161,144	178,845
Total, 1st 70 institutions	14,913,562	15,461,839	16,421,499	17,507,061	18,781,357	20,531,078	22,355,137	24,778,411
71 U. of Medicine and Dentistry NJ	96,365	98,535	110,383	114,491	126,277	140,951	162,417	178,156
72 U. MO-Columbia	122,870	119,079	128,178	136,061	149,002	158,861	174,782	177,011
73 U. KS all campuses	100,702	100,649	108,893	117,115	132,752	148,670	156,467	172,131
74 U. CT all campuses	139,956	147,522	140,840	134,448	134,986	161,084	164,366	172,003
75 U. NE Lincoln	107,721	102,460	117,100	118,857e	131,046	136,023	157,520	171,431
76 U. Miami	128,736	130,056	135,888	136,972	139,608	145,795	153,772	171,319
77 U. OK all campuses	102,337	109,071	114,387	126,861	142,085	150,902	148,695	169,373
78 Rockefeller U.	99,348	105,595	109,999	115,494	121,519	124,138	145,571	166,603
79 Princeton U. [2]	104,157	112,380	114,549	115,996	124,237	134,875	149,411	164,408
80 U. HI Manoa	78,429	111,202	120,107	148,007	156,810	161,300	156,976	161,823
Total, 1st 80 institutions	15,994,183	16,598,388	17,621,823	18,771,363	20,139,679	21,993,677	23,925,114	26,482,669

See explanatory information and SOURCE at end of table.

TABLE B-32. Total R&D expenditures at universities and colleges, ranked by fiscal year 2002 total R&D expenditures: fiscal years 1995--2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
81 OR State U.	123,402	131,334	131,467	138,240	139,285	140,751	153,925	161,735
82 OR Health Sciences U.	74,726	80,333	98,319	109,374 i	120,429 i	131,486	136,785	158,729
83 MS State U.	72,145	84,124	84,157	100,410	110,896	132,503	146,939	158,652
84 Yeshiva U.	94,739e	91,430	96,819	99,000	111,771	139,618	148,230	157,124
85 U. NM all campuses	129,354	116,618	116,152	125,910	115,850	133,980	156,619	150,598
86 U. TX Houston Health Science Ctr.	74,664	82,803	95,638	101,993	105,307	119,587	125,439	138,380
87 Clemson U.	82,883	84,836	84,034	90,150	99,341	114,903	123,885	134,840
88 FL State U.	86,060	78,125	95,908	94,463	97,673	105,095	113,817	134,351
89 U. MA Worcester	62,441	63,341	71,346	82,950	83,040	97,587	111,221	132,729
90 Medical U. SC	57,495	54,426	57,111	57,940	55,819	65,243	116,687	132,030
Total, 1st 90 institutions	16,852,092	17,465,758	18,552,774	19,771,793	21,179,090	23,174,430	25,258,661	27,941,837
91 U. CA Santa Barbara	78,737	91,284	91,149	96,034	104,561	118,154	116,372	131,795
92 U. TX Health Science Ctr. San Antonio	87,336	83,028	86,019	82,357	87,804	103,824	115,154	129,616
93 U. TX Medical Branch Galveston	72,569	73,759	77,683	86,488	93,580	97,896	102,722	129,534
94 Dartmouth C.	50,525	52,945	61,619	64,964	69,522	78,874	109,096	126,839
95 U. SC all campuses	79,710	78,619	77,855	92,785	105,835	104,398	109,973	123,108
96 AZ State U. main campus	77,009	84,653	80,740	92,019	107,184	108,117	118,763	123,016
97 UT State U.	82,468	81,709	91,292	94,228	95,364	103,161	121,359	121,621
98 U. AK Fairbanks all campuses	72,216	71,381	70,943	75,606	88,825	102,500	110,195	116,279
99 WA State U.	96,810	98,641	97,700	95,422	96,943	104,796	107,937	112,469
100 U. CA Riverside	62,539	71,495	75,486	79,775	75,821	83,580	94,455	111,936
Total, 1st 100 institutions	17,612,011	18,253,272	19,363,260	20,631,471	22,104,529	24,179,730	26,364,687	29,168,050
101 Wake Forest U.	68,388	75,331	75,290	76,893	82,827	86,840	98,343	111,634
102 VA Commonwealth U.	76,529	79,018	78,948	80,538	79,785	88,220	99,180	109,619
103 Brown U.	56,269	67,621	71,411	73,977	76,330	81,476	91,636	109,482
104 U. MA Amherst	66,082	73,678	85,811	89,970	86,576	96,907	97,976	109,332
105 Tufts U.	77,093	79,356	83,568	92,130	100,872	105,783	105,806	109,291
106 Auburn U. all campuses	85,566	87,358	85,460	87,768	80,544	92,612	106,347	108,775
107 KS State U.	71,103	71,222	76,896	81,233	85,580	91,790	94,030	106,804
108 NM State U. all campuses	81,455	76,493	81,024	77,370	79,877	79,695	86,963	103,078
109 Tulane U.	100,231	83,660	86,427	87,858	87,324	89,785	99,761	102,998
110 Thomas Jefferson U.	65,705	69,154	69,228	69,460	78,410	89,626	88,936	102,974
Total, 1st 110 institutions	18,360,432	19,016,163	20,157,323	21,448,668	22,942,654	25,082,464	27,333,665	30,242,037
111 Woods Hole Oceanographic Institution	80,235	73,015	77,407	75,011	71,722	81,547	91,029	99,964
112 Medical C. WI	44,169	47,365	51,629	56,021	61,446	70,581	83,857	96,700
113 Georgetown U.	102,421	112,582	119,114	116,611	111,426	133,211	99,228	96,450
114 OK State U. all campuses	75,906	82,960	62,480	71,466	83,108	88,285	90,311	94,987
115 U. NH	42,548	45,693	45,886	52,359	57,613	72,108	87,879	93,222
116 U. VT	54,065	53,659	59,526	57,832	64,049	63,391	75,597	88,602
117 George Washington U.	43,488	49,263	55,158	74,481	66,757	69,300	73,805	86,288
118 U. DE	53,161	54,154	65,095	69,896	73,521	74,711	77,491	85,157
119 WV U.	53,072	54,844	63,312	62,362	63,392	66,130	71,311	84,985
120 U. AR main campus	59,410	59,753	64,868	71,686	61,585	70,817	78,303	83,063
Total, 1st 120 institutions	18,968,907	19,649,451	20,821,798	22,156,393	23,657,273	25,872,545	28,162,476	31,151,455

See explanatory information and SOURCE at end of table.

TABLE B-32. Total R&D expenditures at universities and colleges, ranked by fiscal year 2002 total R&D expenditures: fiscal years 1995--2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
121 TX Tech U.	40,824	43,000	46,645	53,126	58,488	66,263	69,918	82,785
122 U. Louisville	22,835	29,655	33,434	39,147	57,051	64,062	72,857	80,974
123 Rush U.	44,322	48,772	49,969	55,277	60,957	68,189	70,219	79,394
124 MT State U.-Bozeman	47,998	50,097	49,440	52,292	55,475	65,324	69,593	78,211
125 U. ID	52,529	56,198	57,582 i	58,967	62,531	61,347	67,496	76,758
126 ND State U. all campuses	40,677	43,661	35,197	40,007	44,696	50,063	64,882	72,105
127 U. NE Medical Ctr.	38,287	42,612	45,365	50,453	54,205	51,547	60,695	71,000
128 U. CA Santa Cruz	44,294	51,062	49,428	56,533	52,902	56,212	64,253	70,967
129 U. MS all campuses	26,862	26,215	26,231	28,079	32,129 i	44,927	57,597 i	67,838 i
130 SUNY Albany	38,771	66,247	57,415	50,568	64,278	82,792	70,119	67,493
Total, 1st 130 institutions	19,366,306	20,106,970	21,272,504	22,640,842	24,199,985	26,483,271	28,830,105	31,898,980
131 U. NV, Reno	46,783	47,977	52,703	45,476	47,939	56,248	59,229	66,721
132 U. Central FL	37,147	21,488	38,592	35,530	42,466	47,646	79,287	66,351
133 San Diego State U.	35,287	43,201	40,586	41,915	45,579	55,002	58,332	64,302
134 Temple U.	54,742	56,533	54,500	63,024	53,940	52,466	60,182	63,850
135 U. ME	31,901	34,684	33,144	33,106	41,452	54,821	64,070	62,149
136 NJ Institute of Technology	30,940	39,110	38,728	40,982	40,982	47,895	44,177	61,424
137 U. Houston	44,993	49,178	45,916	42,297	43,370	48,902	51,567	59,707
138 Southern IL U. Carbondale	29,631	28,578	30,043	30,490	33,169	36,354	43,207	53,604
139 U. RI	43,103 i	39,575	40,522	37,940	44,452	48,135	50,835	53,347
140 U. of Notre Dame	23,332	24,556	24,116	28,873	30,483	34,524	46,096	52,371
Total, 1st 140 institutions	19,744,165	20,491,850	21,671,354	23,040,475	24,623,817	26,965,264	29,387,087	32,502,806
141 Medical C. GA	31,369	35,971	38,725	39,806	41,103	45,596	52,191	51,705
142 TX A&M U. System Health Science Ctr.	--	--	--	--	--	25,736	40,859	49,636
143 Charles R. Drew U. of Medicine & Science	12,500	16,386	17,205e	17,205e	24,484	31,045	36,717	48,839
144 U. AL Huntsville, The	36,736	38,176	32,817	36,946	40,203	41,274	43,731	48,353
145 Rice U.	34,446	39,696	43,601	41,067	41,069	41,840	42,675	48,169
146 U. LA Lafayette	13,416	13,429	22,381	24,768	30,735	32,692	32,073	47,796
147 FL International U.	16,375	16,856	17,359	17,880	25,061	34,649	44,291	47,654
148 Brandeis U.	36,451	36,760	40,145	44,589	48,305	47,658	52,818	47,122
149 U. Dayton	46,084	43,188	45,437	45,000	36,937	39,345	41,343	46,554
150 Rensselaer Polytechnic Institute	37,247	37,917	38,803e	38,560	39,034	40,762	45,010	45,955
Total, 1st 150 institutions	20,008,789	20,770,229	21,967,827	23,346,296	24,950,748	27,345,861	29,818,795	32,984,589
151 Syracuse U. all campuses	33,939	34,322	34,642	37,322	39,640	40,063	42,476	45,870
152 Naval Postgraduate School	27,510	30,706	32,333	34,095	34,095e	37,502 i	40,889 i	45,227 i
153 U. AR for Medical Sciences	28,389	33,354	37,336	39,487	44,066	49,074	51,921	45,046
154 GA State U.	17,867	18,114	27,069	31,153	36,523	36,600	38,960	44,564
155 Drexel U.	19,389	19,322	19,267	19,603	22,397	24,876	27,698	44,465
156 U. OR	30,386	33,654	31,487	33,315	32,695	35,934	36,881	43,723
157 U. WY	40,470	40,553	47,753	48,500	47,197	43,094	41,632	41,632e
158 C. of William and Mary all campuses	20,597	25,183	24,051	25,966	31,322	33,299	35,829	39,858
159 U. MT, The	18,881	21,421	21,151	20,133	24,372	29,590	33,535	39,367
160 George Mason U.	22,221	23,230	19,126	22,543	26,766	26,793	32,881	38,849
Total, 1st 160 institutions	20,268,438	21,050,088	22,262,042	23,658,413	25,289,821	27,702,686	30,201,497	33,413,190

See explanatory information and SOURCE at end of table.

TABLE B-32. Total R&D expenditures at universities and colleges, ranked by fiscal year 2002 total R&D expenditures: fiscal years 1995--2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
161 Northeastern U.	19,850	17,980	19,822	26,385	30,209	35,340	34,467	38,540
162 U. MD Ctr. for Environmental Science	21,100	21,448	21,377	24,038	26,816	31,605	36,635	38,501
163 MCP Hahnemann U.	41,237	48,790	85,748	95,984	27,516	41,670	32,462	37,945
164 Loyola U. (Chicago, IL)	33,098 i	29,365	30,994	34,241	29,001	30,034	37,156	37,607
165 U. AL, The	23,479	21,806	23,671	23,935	28,909	31,847	33,133	37,130
166 OH U. all campuses	19,713	18,329	21,008	21,469	21,437	23,767	27,146	36,601
167 U. MD Baltimore County	11,868	14,304	19,799	18,155	21,854	26,044	29,641	36,323
168 NM Institute of Mining and Technology	19,584	20,580	21,974	22,791	26,061	23,636	28,392	36,309
169 St. Louis U. all campuses	22,686	25,099	26,517	26,943	27,817	31,002	32,442	35,444
170 Howard U.	24,819	28,894	27,873	23,673	23,557	27,254	30,148	35,387
Total, 1st 170 institutions	20,505,872	21,296,683	22,560,825	23,976,027	25,552,998	28,004,885	30,523,119	33,782,977
171 SUNY Health Science Ctr. Brooklyn	30,781	30,254 i	29,727	27,517	28,840	31,626	31,626e	34,981 i
172 U. MD Biotechnology Institute	18,062	22,933	29,117	31,861	31,172	29,946	32,458	34,440
173 U. ND all campuses	18,940	28,188	20,899	16,938	16,999	17,343	19,692	33,973
174 U. Memphis, The	14,642	18,429	21,271	22,486	24,280	27,381	29,445	33,625
175 U. MO-Rolla	21,220	20,235	20,895	21,740	25,893	25,968	28,799	32,222
176 Boston C.	13,298	14,504	14,746	17,774	21,726	27,767	30,768	31,754
177 FL A&M U.	20,797	22,474	25,415	19,066	21,622	21,612	23,865	31,147
178 Wright State U. all campuses	18,661	17,381	17,291	19,676	23,131	29,092	32,033	30,962
179 U. NV, Las Vegas	17,268	16,893	15,628	16,912	20,170	24,215	27,008	30,527
180 MI Technological U.	22,798	23,882	24,140	26,522	28,074	27,204	29,613	30,005
Total, 1st 180 institutions	20,702,339	21,511,856	22,779,954	24,196,519	25,794,905	28,267,039	30,808,426	34,106,613
181 Desert Research Institute	22,851	20,100	20,000	21,500	23,376	25,691	29,697	29,465
182 Old Dominion U.	14,439	17,577	18,583	20,150	23,030	25,058	24,659	29,223
183 U. PR Medical Sciences Campus	17,354	15,005	15,575	19,830	17,114	21,373	23,913	29,089
184 Uniformed Services U. of the Health Sciences	39,612	36,851	18,812	20,309	22,898	23,987	23,247	28,630
185 Eastern VA Medical School	17,823	17,730	19,109	21,672	24,096	23,299	26,250	28,572
186 U. Akron all campuses	15,589	15,507	17,999	16,326	16,279	19,495	22,266	28,080
187 CO School of Mines	16,585 i	19,291	19,221	20,681	21,715	21,795	23,654	26,515
188 SUNY C. of Environmental Science & Forestry	21,904 i	21,969	20,540	22,036	25,385	26,663	27,854	26,337
189 U. TX Dallas	14,027 i	13,562	14,561	15,211	16,028	15,684	15,684e	26,198
190 CUNY Hunter C.	12,421	15,021	14,037	13,497	15,934	15,047	19,964	25,905
Total, 1st 190 institutions	20,894,944	21,704,469	22,958,391	24,387,731	26,000,760	28,485,131	31,045,614	34,384,627
191 U. Southern MS	8,827	9,112	9,078	11,117	16,211	17,706	20,286	25,685
192 U.S. Air Force Academy	2,838 i	3,279 i	3,720 i	4,163	3,761	4,551	5,323	25,589
193 Jackson State U.	4,960 i	5,224	5,135	6,111	8,823	12,027	25,663	25,445
194 NY Medical C.	18,424	16,372	16,890	19,159	20,436	23,348	24,283	25,222
195 San Jose State U.	21,005 i	21,005 i	21,005 i	21,005e	21,005e	21,005e	22,709	25,003
196 U. WI Milwaukee	19,684	19,679	19,995	20,807	21,325	20,010	23,492	24,933
197 U. Toledo	7,436	8,180e	8,729	11,512	11,819	13,694	16,278	24,825
198 U. MO-Kansas City	11,727	12,597	11,734	12,875	14,331	19,647	18,795	24,060
199 Loma Linda U.	9,270	10,837	13,396	12,788	18,818	24,369	24,183 i	23,996
200 FL Atlantic U.	13,776	10,576	10,521	14,265	17,151	19,535	25,111	23,995
Total, 1st 200 institutions	21,012,891	21,821,330	23,078,594	24,521,533	26,154,440	28,661,023	31,251,737	34,633,380

See explanatory information and SOURCE at end of table.

TABLE B-32. Total R&D expenditures at universities and colleges, ranked by fiscal year 2002 total R&D expenditures: fiscal years 1995--2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
201 Morehouse School of Medicine	7,896	13,206	13,218	13,614	13,622	16,889	19,670	23,956
202 U. TX El Paso	12,705	13,548	15,850	14,092	21,961	20,877	21,889	23,684
203 Catholic U. America	7,670	7,427	8,845	9,418	13,317	9,329	17,539	22,883
204 U. MA Lowell	15,505	18,515	18,695	19,372	19,413	19,334	20,656	22,827
205 Lehigh U.	35,117	34,780	26,451	26,115	27,902	25,506	29,058	22,687
206 SUNY Upstate Medical U.	13,177	14,093	14,914	14,089	15,099	17,095	17,294	22,326
207 SUNY Binghamton	17,106	18,500	19,310	20,754	17,998	18,661	18,992	21,343
208 Brigham Young U. all campuses	14,102	11,791e	11,502e	11,963	23,985	17,237	19,171	21,228
209 Meharry Medical C.	10,738	11,212	11,212e	11,212e	9,460	9,460e	14,984 i	20,508
210 SD State U.	13,448	14,925	15,671	15,631	15,599	16,784	19,717	20,085
Total, 1st 210 institutions	21,160,355	21,979,327	23,234,262	24,677,793	26,332,796	28,832,195	31,450,707	34,854,907
211 U. PR Mayaguez Campus	40,393	44,502	48,857	51,181	55,648	34,683	18,627	19,939
212 IL Institute of Technology	11,923	16,000	16,182	14,013	13,438	13,734	14,722	19,909
213 Western MI U.	9,033	9,606	10,035	11,532	13,727	14,230	14,976	19,023
214 Creighton U.	11,036	11,641	13,127	15,011	16,015	15,841	17,674	18,982
215 Wichita State U.	9,691	9,904	11,797	13,117	14,555	16,213	16,142	18,842
216 U. South AL	13,426	14,873	13,083	11,990	11,990e	9,865	9,865e	17,692
217 Portland State U.	7,920	9,376	9,285	10,507	13,940	16,494	16,838	17,683
218 Northern AZ U.	10,856	11,572	10,800	11,652	11,857	12,570	14,657	17,263
219 Clark Atlanta U.	25,245	34,566	28,893	29,637	19,467	16,891	17,173	17,194
220 CUNY City C.	22,695	22,166	22,526	21,147	15,888	17,059	17,099	17,103
Total, 1st 220 institutions	21,322,573	22,163,533	23,418,847	24,867,580	26,519,321	28,999,775	31,608,480	35,038,537
221 Medical C. OH	13,008	13,367	13,469	11,425	12,467	13,747	15,276	17,040
222 AL A&M U.	9,417	9,615 i	9,813e	14,143	11,562	8,238	11,977 i	15,717
223 NC Agricultural and Technical State U.	15,774	15,991	15,817	14,816	14,741	13,400	15,629	15,353
224 TN State U.	7,431	9,137	8,629	9,329	10,762	11,285	12,791	15,262
225 U. TX Arlington	21,135	24,010	37,509	19,075	11,450	10,723	17,486	15,097
226 U. MA Dartmouth	3,709	4,092	4,197	4,902	5,820	6,905	9,488	15,030
227 U. NC Wilmington	6,303 i	6,604 i	6,905 i	7,208	7,647	7,859	10,307	14,568
228 Southern IL U. Edwardsville	1,549 i	1,355 i	1,161 i	966	1,316	1,344	1,270	14,043
229 CA State Polytechnic U. San Luis Obispo	5,000 i	5,324 i	5,648 i	5,972	11,892	12,133	12,193	14,002
230 U. of the VI	3,811 i	4,828	4,828e	4,828e	3,310	3,310e	8,645 i	13,981
Total, 1st 230 institutions	21,409,710	22,257,856	23,526,823	24,960,244	26,610,288	29,088,719	31,723,542	35,188,630
231 Institute of Paper Science and Technology	9,640	12,532 i	15,424e	15,424e	10,533e	10,533e	13,929	13,929e
232 Cleveland State U.	10,496	10,690 i	10,884e	11,211e	11,893e	10,214	12,986	13,855
233 Stevens Institute of Technology	13,766	15,249	12,179	12,944	13,794	15,879	13,855	13,855e
234 Rochester Institute of Technology	6,370	8,118	8,398	8,133e	9,340e	4,755	11,416	13,500
235 Miami U. all campuses	7,137	8,847	9,644	6,738	10,964	10,674	12,804	13,279
236 U. North TX	10,616	11,250	10,678	8,813	7,487	9,108	14,224	13,227
237 U. MA Boston	9,146	10,898	11,194	11,491	11,132	12,058	11,672	13,121
238 Albany Medical C.	14,981	7,888	6,965	8,236	10,377	11,522	12,836	13,104
239 Mercer U. all campuses	11,181	13,641	13,704	14,995	17,250	18,138	15,337	12,998
240 U. North TX Health Science Ctr. Ft. Worth	5,381	6,499	7,258	8,921	9,689	10,131	11,035	12,893
Total, 1st 240 institutions	21,508,424	22,363,468	23,633,151	25,067,150	26,722,747	29,201,731	31,853,636	35,322,391

See explanatory information and SOURCE at end of table.

TABLE B-32. Total R&D expenditures at universities and colleges, ranked by fiscal year 2002 total R&D expenditures: fiscal years 1995--2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
241 Kent State U. all campuses	10,802	11,497	11,439	12,690	11,083	10,817	11,316	12,868
242 LA Tech U.	2,707 i	3,100	5,379 i	7,659	7,659e	10,228	9,986	12,110
243 East TN State U.	2,205	2,255	2,252	3,152	3,351	6,494	8,222	11,701
244 U. AK Anchorage all campuses	0 i	0 i	0 i	0e	4,782	4,782e	8,233 i	11,685e
245 U. Tulsa	8,107	9,565	9,776	8,235	10,040	10,054	12,553	11,603
246 U. MO-St. Louis	7,503	7,600	8,150	9,462	10,294	9,898	10,084	11,519
247 East Carolina U.	7,772	6,817	6,600	7,644	9,014	8,461	10,535	11,513
248 Marshall U. Graduate C.	206	234	180	25	66	6,231	7,218	11,285
249 U. TX San Antonio	4,760 i	5,538	15,890	7,220	7,780	10,292	11,331	11,115
250 Hampton U.	6,344	3,854	8,002	7,140	7,472	9,323	9,158	11,067
Total, 1st 250 institutions	21,558,830	22,413,928	23,700,819	25,130,377	26,794,288	29,288,311	31,952,272	35,438,857
251 Polytechnic U.	10,897	10,964	8,452	6,373	9,050	15,500	8,277	10,915
252 U. HI Hilo	--	--	--	--	--	--	--	10,841
253 CA State U. Northridge	4,821 i	3,940 i	3,059 i	2,175	3,230	6,190	6,190e	10,619
254 U. Denver	11,091	8,349	9,019	10,589	10,247	8,383	12,944	10,539
255 Worcester Polytechnic Institute	11,611	9,407	10,710	9,637	9,618	10,315	9,348	10,493
256 Prairie View A&M U.	8,019	10,621	9,768	9,952	10,157	9,464	11,297	10,444
257 Teachers C. Columbia U.	736 i	1,005	1,381	6,775	7,206	8,561	9,676	10,409
258 Northern IL U.	12,600	11,674	7,466	6,725	6,455	7,431	9,028	10,366
259 ID State U.	6,092	8,732	5,495	10,016	5,642	8,899	8,847	10,119
260 Southern U. A&M C. all campuses	9,639	10,748	10,249	9,063	9,296	8,302	9,052 i	10,012 i
Total, 1st 260 institutions	21,634,336	22,489,368	23,766,418	25,201,682	26,865,189	29,371,356	32,036,931	35,543,614
261 Tuskegee U.	7,446	9,061	33,046	37,354	9,223	8,893	9,539	9,965
262 TN Technological U.	10,184	9,188	9,053	9,661	9,204	8,878	9,347	9,823
263 U. LA Monroe, The	5,409	6,134	7,112	6,140	8,135	8,135e	8,870 i	9,811 i
264 Marquette U.	5,588	5,946	5,855	6,763	6,469	7,653	7,236	9,807
265 Southern Methodist U.	7,595	9,050	8,220	7,964	9,401	9,713	8,948	9,774
266 U. PR Rio Piedras Campus	5,554	6,116	6,671	9,959	9,885	9,308	10,341	9,736
267 SD School of Mines and Technology	4,795	5,015	4,301	4,550	4,161	5,743	6,922	9,692
268 CA State U. Fresno	6,309 i	7,546 i	8,785	10,345	11,450	11,598	4,531	9,398
269 CA State U. Fullerton	1,749 i	1,749 i	1,749 i	1,749e	3,632 i	5,515 i	7,398 i	9,282
270 Air Force Institute of Technology	5,960	5,877	7,619	4,240	4,316	7,771	8,311	9,243
Total, 1st 270 institutions	21,694,925	22,555,050	23,858,829	25,300,407	26,941,065	29,454,563	32,118,374	35,640,145
271 TX A&M U. Corpus Christi	--	--	--	--	--	5,999	5,606	9,124
272 Miles C.	--	--	--	--	--	--	--	8,785
273 U. NC Charlotte	5,688 i	6,014 i	6,340 i	6,669	9,041	7,790	7,905	8,773
274 U. West FL	2,461 i	3,072 i	3,683 i	4,294	4,588	6,248	7,395	8,652
275 Finch U. of Health Sciences/Chicago Medical School	6,692	7,022	6,672	6,672e	6,764	7,587	8,037	8,645
276 U. SD	3,149	5,500	4,586	4,959	5,762	4,742	5,546	8,368
277 U. Houston-Clear Lake	4,157 i	3,335 i	2,513 i	1,691	5,963	7,091	11,519	8,362
278 Clarkson U.	9,314	8,264	6,964	6,345	6,989	7,751	8,322	8,322e
279 TX A&M U. Kingsville	5,243 i	5,933 i	6,623 i	7,317	6,397	7,404	6,919	8,208
280 Southwest TX State U.	3,413 i	3,376 i	3,339 i	3,299	3,597	4,507	8,884	8,109
Total, 1st 280 institutions	21,735,042	22,597,566	23,899,549	25,341,653	26,990,166	29,513,682	32,188,507	35,725,493

See explanatory information and SOURCE at end of table.

TABLE B-32. Total R&D expenditures at universities and colleges, ranked by fiscal year 2002 total R&D expenditures: fiscal years 1995--2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
281 CA State U. Long Beach	5,676 i	5,843	5,843	18,563 i	31,283	32,551	3,995	8,026
282 CA State U. Los Angeles	2,527 i	2,029 i	1,531 i	1,033 i	535	9,062	5,557	7,933
283 Rose-Hulman Institute of Technology	759 i	851 i	943 i	1,035 i	1,132	4,994	18,540	7,912
284 Tarleton State U.	2,535	2,987	2,695	3,954	3,905	3,872	6,607	7,871
285 Harvey Mudd C.	3,194 i	3,819 i	4,444 i	5,069 i	5,699e	5,699e	6,443 i	7,306 i
286 VA State U.	3,134	3,270	3,988	3,338	2,611	4,422	5,066	7,144
287 Humboldt State U.	3,699 i	3,937 i	4,175 i	4,417	5,557	5,557e	6,282 i	7,123 i
288 Universidad Central Del Caribe	2,897	2,626	2,456	3,558 i	4,660	5,677	6,943	7,103
289 Western IL U.	14,009	13,517	14,152	15,882	10,049	8,489	7,759	7,042
290 Alfred U. all campuses	4,667	4,217	3,694	5,275	5,857	6,442	6,678	6,916
Total, 1st 290 institutions	21,778,139	22,640,662	23,943,470	25,403,777	27,061,454	29,600,447	32,262,377	35,799,869
291 Oakland U.	7,168	6,832	6,598	7,272	6,422	6,422e	7,397	6,869
292 CUNY Queens C.	3,397	2,980	2,686	3,353	3,083	3,827	4,595	6,718
293 FL Institute of Technology	7,973	8,013	5,077	5,848	5,830	6,058	6,195	6,669
294 Boise State U.	3,285	3,102	3,211	3,412	3,501	3,480	6,153	6,446
295 Xavier U. LA	10,048	5,188	5,527	5,388	3,294	3,425	5,113	6,413
296 CUNY Brooklyn C.	2,436	2,800	2,969	3,132e	5,293	6,342	6,442	6,217
297 KY State U.	2,920	2,773	2,139	713	713e	2,354 i	3,996	6,188
298 U. AR Pine Bluff	4,780	3,424	3,974	4,151	4,151e	4,695 i	5,240	5,976
299 Duquesne U.	1,440	861	1,396	1,297	2,025	2,662	2,561	5,955
300 Alcorn State U.	3,233 i	3,368	4,243 i	5,119	5,223	8,034	7,370	5,809
Total, 1st 300 institutions	21,824,819	22,680,003	23,981,290	25,443,462	27,100,989	29,647,746	32,317,439	35,863,129
301 New School U.	4,592 i	4,801 i	5,011	3,705	5,230	5,209	5,791	5,791e
302 Wesleyan U.	5,093	5,245	5,927	5,146	5,373	5,673	5,846	5,614
303 Stephen F. Austin State U	3,392	3,990	5,083	4,213	4,892	5,289	4,994	5,582
304 Wellesley C.	1,782	4,944	4,943	4,943e	5,128 i	5,313 i	5,498	5,498e
305 CA State U. Chico	3,413	1,629	3,558	3,376	3,106	2,390	3,904	5,486
306 Villanova U.	1,996	2,040	2,141	4,714	3,950	5,280	5,380 i	5,481e
307 Bowling Green State U. all campuses	3,700	3,942	3,542	3,392	3,454	3,454e	5,028	5,327
308 Western KY U.	3,071 i	4,160 i	5,249 i	6,342	3,287	3,770	4,165	5,281
309 West TX A&M U.	1,291 i	1,711 i	2,131 i	2,551	2,267	1,751	4,515	5,261
310 U. NE Omaha	1,589 i	1,685 i	1,781 i	1,879	4,097	4,923	5,518	5,220
Total, 1st 310 institutions	21,854,738	22,714,150	24,020,656	25,483,723	27,141,773	29,690,798	32,368,078	35,917,670
311 Embry-Riddle Aeronautical U.	2,332 i	2,436 i	2,540 i	2,647	2,647e	2,700e	7,711	5,102
312 Norfolk State U.	1,273	2,239	1,401	2,524	2,995	3,408	3,984	4,967
313 MT Tech of The U. MT	3,096 i	3,474 i	3,852 i	4,230 i	4,613	4,155	4,616	4,797
314 U. GU	2,777 i	2,789 i	2,801 i	2,819	2,829	4,130	3,752	4,571
315 Northeastern OH Universities C. of Medicine	3,193	2,493	2,990	2,918	3,389	4,011	4,532	4,525
316 U. NC Greensboro	2,437	2,028	1,882	2,619	2,368	2,368e	3,881	4,454
317 American U.	3,063	3,279	3,029	3,453	2,987	2,245	2,565	4,420
318 Ponce School of Medicine	3,418	4,450	2,802	2,953 i	3,105	3,403	3,842	4,365
319 U. DC	3,227 i	3,244	3,244e	3,074	3,394	2,737	3,001	4,223
320 CA State U. Bakersfield	490 i	418 i	346 i	274 i	200e	3,703	3,703e	4,199 i
Total, 1st 320 institutions	21,880,044	22,741,000	24,045,543	25,511,234	27,170,300	29,723,658	32,409,665	35,963,293

See explanatory information and SOURCE at end of table.

TABLE B-32. Total R&D expenditures at universities and colleges, ranked by fiscal year 2002 total R&D expenditures: fiscal years 1995--2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
321 TX Southern U.	4,173	3,820	3,867	2,690	2,507	2,182	2,468	4,189
322 Lamar U.	2,189	2,407	1,988	3,051	3,739	3,204	3,441	4,030
323 Western WA U.	3,017 i	3,249 i	3,481 i	3,716	3,894	3,433	3,560	4,019
324 Ball State U.	2,248	2,667	3,076	2,361	2,056	2,429	3,071	4,008
325 Langston U.	3,187	2,521	1,828	2,031	2,340	2,553	2,863	3,975
326 CA State U. Dominguez Hills	3,225 i	4,547 i	5,869 i	7,191 i	8,517	998	4,311	3,970
327 U. Scranton	2,102 i	2,355 i	2,608 i	2,861 i	3,114 i	3,367 i	3,620 i	3,873
328 Baylor U.	1,471	1,251	2,233	2,032	2,032e	3,307	2,698	3,868
329 IL State U.	5,166	4,608	4,596	4,688e	4,326	4,434	3,902	3,848
330 Fordham U.	2,067	2,712	3,663	2,247	3,134	3,584	3,639	3,793
Total, 1st 330 institutions	21,908,889	22,771,137	24,078,752	25,544,102	27,205,959	29,753,149	32,443,238	36,002,866
331 CA State U. San Bernardino	248 i	294 i	340 i	390	3,301	1,797	1,906	3,740
332 Bryn Mawr C.	2,403	3,432	7,016	4,231	3,929	2,791	3,066	3,502
333 Clark U.	2,228	1,954	2,417	2,147	2,651	2,908	3,039	3,418
334 Nova Southeastern U.	1,265	1,258	1,402	1,986	3,106	2,919	2,594	3,327
335 TX Christian U.	2,783	2,787	3,175	3,125	4,061	3,050	3,678	3,300
336 C. Charleston	1,581 i	1,717 i	1,853 i	1,989	2,100	3,047	3,069	3,295
337 Lincoln U. (Jefferson City, MO)	2,934	2,970	2,899	3,313	2,686	2,502	2,236	3,291
338 Hampshire C.	2,380 i	2,782 i	3,185	2,972	2,900	2,658	3,152	3,224
339 Eastern MI U.	1,255 i	1,318 i	1,381 i	1,444 i	1,512	4,118	2,992	3,164
340 DE State U.	1,036	2,071	1,947	2,883	2,765	3,415	2,494	3,162
Total, 1st 340 institutions	21,927,002	22,791,720	24,104,367	25,568,582	27,234,970	29,782,354	32,471,464	36,036,289
341 Maharishi U. of Management	699	0	0	0	0	1,632	1,612	3,112
342 Spelman C.	1,435	1,084	2,553	1,744	2,007	2,082	3,406	3,082
343 Fisk U.	1,800 i	1,969	1,969e	2,909	4,034	3,401	2,722	3,030
344 Macalester C.	590 i	811 i	1,032 i	1,253 i	1,474 i	1,695 i	1,923	3,024
345 Santa Clara U.	1,895 i	1,954 i	2,077 i	2,189 i	2,326 i	2,509 i	2,723 i	3,024 i
346 Ft. Valley State U.	3,009	2,474	2,863	2,989	2,937	2,768	2,768e	2,985
347 Sam Houston State U.	3,905 i	5,490	5,849	4,532	3,892	3,053	2,441	2,976
348 Williams C.	1,853 i	1,853 i	1,853 i	1,853e	1,853e	1,853e	2,407 i	2,961
349 CUNY Herbert H. Lehman C.	1,327 i	1,199	1,247e	1,308 i	1,370	1,632	2,255	2,955
350 SC State U.	4,091 i	3,000	2,855	2,885	2,900	2,915	2,915e	2,931
Total, 1st 350 institutions	21,947,606	22,811,554	24,126,665	25,590,244	27,257,763	29,805,894	32,496,636	36,066,369
351 Colby C.	332 i	350 i	368 i	389	355	392	968	2,929
352 James Madison U.	1,172 i	1,303 i	1,434 i	1,568	1,781	1,121	1,449	2,867
353 Morehouse C.	1,074	592	592e	592e	2,853	2,853e	2,853 i	2,853 i
354 Institute of Textile Technology	2,642	2,781	2,813	2,776	2,346	2,638	3,171	2,826
355 TX Woman's U.	1,712	1,818	2,224	2,359	2,179	3,005	2,898	2,822
356 CA State Polytechnic U. Pomona	2,105 i	1,847 i	1,589 i	1,331 i	1,069	1,703	2,498	2,806
357 U. Redlands	--	--	--	--	--	--	--	2,728
358 NM Highlands U.	2,035 i	2,585	2,627 i	2,669 i	2,712	6,511	2,235	2,706
359 St. Joseph's U.	322 i	413 i	504 i	595	311	975	1,628	2,703
360 C. NJ, The	--	--	--	--	--	--	--	2,686
Total, 1st 360 institutions	21,959,000	22,823,243	24,138,816	25,602,523	27,271,369	29,825,092	32,514,336	36,094,295

See explanatory information and SOURCE at end of table.

TABLE B-32. Total R&D expenditures at universities and colleges, ranked by fiscal year 2002 total R&D expenditures: fiscal years 1995--2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
361 U. San Diego	701	252	248	484	343	545	240	2,686
362 Mt. Holyoke C.	892 i	936 i	980 i	1,033	1,721	1,835	1,734	2,644
363 Midwestern U.	2,126	1,512	2,250	1,840	1,701	2,470	2,421	2,562
364 Ithaca C.	770 i	1,013 i	1,256 i	1,499	2,066	2,565	2,034	2,513
365 Occidental C.	2,220 i	2,220 i	2,220 i	2,220e	862	826	1,543	2,503
366 Milwaukee School of Engineering	1,152 i	1,335 i	1,518 i	1,704	1,776	2,020	2,117	2,499
367 St. Cloud State U.	985 i	1,301 i	1,617 i	1,935	1,935e	1,935e	2,188 i	2,481 i
368 CA State U. Hayward	544 i	816 i	1,088 i	1,360 i	1,632 i	1,904 i	2,176 i	2,455
369 Grambling State U.	204	1,455	2,634	1,997	1,997e	2,264	2,264e	2,452
370 Towson U.	180	189	247	959	1,452	2,138	2,282	2,449
Total, 1st 370 institutions	21,968,774	22,834,272	24,152,874	25,617,554	27,286,854	29,843,594	32,533,335	36,119,539
371 CUNY Graduate Ctr.	3,449 i	4,224 i	4,999	5,109	1,098	739	2,906	2,391
372 Depaul U.	1,182	1,300	1,103	1,233	1,028	863	1,628	2,389
373 Grand Valley State U.	727	1,810	1,247	892	992	1,138	1,161	2,374
374 U. TX-Pan American	1,321 i	1,434 i	1,547 i	1,664	1,684	1,688	2,279	2,336
375 Bowie State U.	173	49	2,672	4,511	2,675	2,675e	2,207	2,330
376 U.S. Naval Academy	4,494 i	3,881 i	3,268 i	2,651	2,316	2,786	3,140	2,324
377 U. IL Springfield	--	--	--	--	--	910	2,025	2,324
378 Union C. (Schenectady, NY)	988	1,016	687	694	1,043	1,002	1,045	2,316
379 U. Central AR	--	--	--	--	--	1,758	2,405	2,306
380 Eastern WA U.	2,445 i	2,445 i	2,445 i	2,445e	2,356	2,108	2,620	2,275
Total, 1st 380 institutions	21,983,553	22,850,431	24,170,842	25,636,753	27,300,046	29,859,261	32,554,751	36,142,904
381 U. Northern IA	2,165	1,944	1,623	1,682	1,542	1,744	1,961	2,254
382 Central MI U.	558e	1,043	843e	0	755	755e	2,032	2,252
383 Savannah State U.	214	317	316	331	513	905	2,181	2,206
384 New England C. of Optometry	144	723	1,111	1,734	1,643	1,228	1,608	2,154
385 Amherst C.	1,664 i	1,634 i	1,604 i	1,573	1,498	1,859	1,802	2,115
386 Murray State U.	1,235	1,059	1,490	2,043	1,966	2,084	2,331	2,112
387 U. AR Little Rock	--	--	--	--	--	3,400e	2,088	2,088e
388 Pomona C.	1,240 i	1,164 i	1,088 i	1,010	1,619	1,791	1,298	2,063
389 U. North FL	--	--	--	--	--	--	1,222	2,061
390 Winston-Salem State U.	1,123	1,406	2,034	2,468	1,712	3,447	6,057	2,022
Total, 1st 390 institutions	21,991,896	22,859,721	24,180,951	25,647,594	27,311,294	29,876,474	32,577,331	36,164,231
391 Albany State U.	3,687 i	3,687e	3,687e	1,019	1,019e	1,393	1,972	1,987
392 SUNY C. Buffalo	1,604	2,570	2,448	1,157	1,689	1,683	1,552	1,969
393 Pittsburg State U.	281	546	361	1,631	1,614	1,663	2,161	1,951
394 Gallaudet U.	3,007 i	2,743 i	2,479 i	2,212	2,348	1,752	1,824	1,950
395 Claremont Graduate U.	1,017	1,100	902	401	1,870	2,416	2,369	1,949
396 CUNY C. Staten Island	954	901	794	1,014	979	1,208	1,635	1,944
397 U. WI La Crosse	1,133	1,310	1,045	1,185	1,113	1,404	1,563	1,939
398 Bradley U.	887 i	1,089 i	1,291 i	1,493	1,341	1,371	1,197	1,928
399 CA State U. Monterey Bay	--	--	--	--	--	--	1,911	1,911e
400 Bucknell U.	885 i	997 i	1,109 i	1,221 i	1,335	1,835	1,791	1,900
Total, 1st 400 institutions	22,005,351	22,874,664	24,195,067	25,658,927	27,324,602	29,891,199	32,595,306	36,183,659
401 U. of the Pacific	970	860	2,601	886	999	1,020	1,241	1,891
402 Southwest MO State U.	2,169 i	2,046 i	1,923 i	1,797	1,324	1,324e	1,550	1,888
403 U. WI Stevens Point	1,871	1,649	1,324	1,112	1,302	1,227	1,827	1,849
404 Smith C.	1,728 i	1,536 i	1,344	1,295	1,107	2,582	2,578	1,827
405 Hamilton C.	475 i	475 i	475 i	475e	751 i	1,027	931	1,821

See explanatory information and SOURCE at end of table.

TABLE B-32. Total R&D expenditures at universities and colleges, ranked by fiscal year 2002 total R&D expenditures: fiscal years 1995--2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
406 U. Richmond	454	807	937	1,035	1,099	1,178	1,271	1,786
407 U. Southern ME	480 i	524 i	568 i	614	1,366	1,366e	1,544 i	1,751 i
408 SUNY C. of Optometry	537	641	499	668	1,135	1,001	1,435	1,750
409 Central WA U.	1,074 i	1,237 i	1,400 i	1,563 i	1,731	2,006	1,880	1,738
410 Carleton C.	936 i	934 i	932 i	930 i	927	1,245	1,176	1,688
Total, 1st 410 institutions	22,016,045	22,885,373	24,207,070	25,669,302	27,336,343	29,905,175	32,610,739	36,201,648
411 Morgan State U.	3,663 i	3,768 i	3,873 i	3,981	1,066	4,371	2,390	1,674
412 CUNY York C.	900	952	1,311	1,526	1,392	1,341	1,117	1,664
413 Middlebury C.	774 i	767 i	760 i	753 i	742	1,371	1,285	1,587
414 Swarthmore C.	875	871	869	996	996e	996e	966	1,574
415 Colgate U.	--	--	--	--	--	1,664	1,694	1,544
416 Hope C.	920 i	949 i	978 i	1,007 i	1,039	922	1,417	1,514
417 Calvin C.	673 i	763 i	853 i	943 i	1,033	1,191	1,300	1,509
418 U. New Haven	505 i	507	558e	558e	198	198e	1,492	1,492e
419 Long Island U. all campuses	238	155	902	1,221	1,406	1,267	1,201	1,477
420 Dickinson C.	--	--	--	1,789	948	739	1,528	1,475
Total, 1st 420 institutions	22,024,593	22,894,105	24,217,174	25,682,076	27,345,163	29,919,235	32,625,129	36,217,158
421 U. of Health Sciences	963	677	652	885	885e	677	1,166	1,436
422 AL State U.	1,000	1,000	818	1,177	1,365	1,365e	1,433e	1,433
423 Furman U.	577	728	665	522	365	793	719	1,414
424 U. Northern CO	285	561	799	736e	701	1,128	1,265	1,376
425 U. WI Stout	1,305	1,523	1,306	1,386	976	1,236	1,070	1,358
426 Lafayette C.	550 i	575 i	600 i	625	600	665	1,008	1,344
427 St. John's U. (Jamaica, NY)	1,068	1,903	2,216	1,572	1,617	1,184	1,184e	1,315 i
428 Northeastern State U.	--	--	--	--	--	--	--	1,314
429 Kettering U.	379 i	396 i	413 i	433	647	625	1,161	1,311
430 Allegheny C.	592 i	627 i	662 i	697 i	734	318	1,023	1,306
Total, 1st 430 institutions	22,031,312	22,902,095	24,225,305	25,690,109	27,353,053	29,927,226	32,635,158	36,230,765
431 Chicago State U.	740	757	759	713	1,266	1,263	1,415	1,297
432 CO C.	279 i	257 i	235 i	211	877	1,213	1,548	1,286
433 AR State U. main campus	868 i	899 i	930 i	962	1,527	1,203	1,347	1,278
434 Youngstown State U.	462 i	607 i	752 i	898	468	532	849	1,259
435 U. NC Asheville	601 i	636 i	671 i	706 i	742	861	1,269	1,232
436 IN State U. all campuses	1,208	1,548	1,265	5,255	4,977	4,196	1,504	1,220
437 Bates C.	340	588	402	682	754	598	940	1,217
438 Haverford C.	631	1,077	1,304	1,303	1,104	1,191	1,178	1,215
439 SUNY C. Old Westbury	610	640	991	777	691	1,310	1,310e	1,214
440 Seton Hall U.	2,411e	2,400e	2,400e	2,400	1,116	996	826	1,200
Total, 1st 440 institutions	22,039,462	22,911,504	24,235,014	25,704,016	27,366,575	29,940,589	32,647,344	36,243,183
441 Spalding U.	15	0	0	189	0	462	1,055	1,188
442 Bowdoin C.	459	909	425	474	510	576	512	1,176
443 Reed C.	561 i	521 i	481 i	441 i	400e	716	814	1,145
444 Loyola C.	1,386	1,023	905	1,303	1,445	1,724	954	1,140
445 Kirksville C. of Osteopathic Medicine	910	747	644	509	743	816	907	1,134

See explanatory information and SOURCE at end of table.

TABLE B-32. Total R&D expenditures at universities and colleges, ranked by fiscal year 2002 total R&D expenditures: fiscal years 1995--2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
446 Western U. of Health Sciences	152	206	58	295	295e	332 i	369	1,132
447 U. Hartford	357	466	365	397	773	1,061	1,068	1,130
448 U.S. Coast Guard Academy	306 i	304 i	302 i	300	570	405	468	1,128
449 GA Southern U.	1,067 i	1,009 i	951 i	893 i	833	944	841	1,127
450 West Chester U. PA	1,919	462	506	672	769	794	794e	1,115
Total, 1st 450 institutions	22,046,594	22,917,151	24,239,651	25,709,489	27,372,913	29,948,419	32,655,126	36,254,598
451 SUNY C. Oswego	1,056 i	920	803	716	542	744	783	1,112
452 Coastal Carolina U.	--	--	--	--	--	1,277	1,038	1,100
453 Grinnell C.	332 i	332 i	332 i	332e	4,300	1,500	560	1,098
454 Chapman U.	193 i	229 i	265 i	301 i	337 i	373	460	1,068
455 Barnard C.	1,246	934	943e	1,172	1,181	1,347	1,376	1,064
456 Benedict C.	850	634	634e	800 i	966 i	1,143	1,044	1,061
457 SUNY C. Plattsburgh	1,520	1,207	951	1,133	793	996	1,118	1,061
458 Elizabeth City State U.	758 i	1,098	1,379	684	1,040	1,558	1,248	1,058
459 MN State U. Mankato	1,320 i	1,525 i	1,730 i	1,939	564	607	751	1,054
460 U. Houston-Downtown	964 i	996 i	1,028 i	1,060 i	1,096	837	837e	1,054
Total, 1st 460 institutions	22,054,833	22,925,026	24,247,716	25,717,626	27,383,732	29,958,801	32,664,341	36,265,328
461 Drake U.	369 i	364 i	359 i	354 i	349	468	366	1,053
462 NC Central U.	835	852 i	869e	869	825e	808 i	913 i	1,035 i
463 MS Valley State U.	471	586	563	350	495	834	1,316	1,030
464 State U. West GA	614 i	821 i	1,028 i	1,235 i	1,442 i	1,655	1,360	1,029
465 OR Institute of Technology	--	--	--	--	--	--	--	1,025
466 Tougaloo C.	1,606 i	1,710 i	1,815	1,180	1,227	895	1,007	1,007 i
467 CUNY Medgar Evers C.	--	--	--	--	--	291	756	992
468 PA C. of Optometry	649 i	564 i	479 i	394 i	307	581	800	992
469 Franklin and Marshall C.	1,006 i	1,056 i	1,106 i	1,158	1,424	1,188	698	989
470 Rider U.	--	--	--	--	--	891	884	939
Total, 1st 470 institutions	22,060,383	22,930,979	24,253,935	25,723,166	27,389,801	29,966,412	32,672,441	36,275,419
471 Southern U. New Orleans	--	--	--	--	--	183	680	937
472 Albany C. of Pharmacy	--	--	--	--	--	1,360	1,208	906
473 U. WI Green Bay	390	590	533	491	478	543	602	900
474 Philadelphia C. of Osteopathic Medicine	882	869	688	516	1,050	930	935	891
475 Montclair State U.	159 i	206 i	253 i	300 i	347 i	396	766	889
476 U. WI Superior	1,611	951	494	383	505	380	404	889
477 Simmons C.	556 i	650 i	744 i	838 i	937	912	710	872
478 U. AK Southeast	237 i	326 i	415 i	504 i	593 i	682 i	771 i	868e
479 St. Olaf C.	358 i	395 i	432 i	469 i	506	544	453	847
480 CUNY John Jay C. of Criminal Justice	248	686	688	1,325	1,442	1,274	1,070	844
Total, 1st 480 institutions	22,064,824	22,935,652	24,258,182	25,727,992	27,395,659	29,973,616	32,680,040	36,284,262
481 U. WI Eau Claire	377	386	479	613	604	684	514	839
482 Southeastern LA U.	584 i	681 i	778 i	875 i	976	1,057	645	836
483 U. of the Sciences in Philadelphia	881	695	650	358	358e	532	573	833
484 John Carroll U.	719 i	807 i	895 i	983 i	1,072	1,072e	515	823
485 Nicholls State U.	--	--	--	--	--	504	687	820

See explanatory information and SOURCE at end of table.

TABLE B-32. Total R&D expenditures at universities and colleges, ranked by fiscal year 2002 total R&D expenditures: fiscal years 1995--2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
486 SUNY C. Brockport	460e	532	591	609	676	722	722e	819 i
487 Bennett C.	112	93	93e	811	811e	811 i	811 i	811 i
488 Fairfield U.	521 i	629 i	737 i	845 i	953 i	1,061	1,648	810
489 U. Central OK	164 i	180 i	196 i	215	1,173	509	795	810
490 Bethune Cookman C.	0	451	606	566	583	586	926	794
Total, 1st 490 institutions	22,068,642	22,940,106	24,263,207	25,733,867	27,402,865	29,981,154	32,687,876	36,292,457
491 Indiana U. PA all campuses	349	562	512	512e	389	731	756	794
492 Appalachian State U.	549	511	511	558	621	694	752	781
493 U. WI Parkside	319	338	339	187	158	362	575	769
494 Des Moines U. Osteopathic Medical Ctr.	80	316	302	416	673	417	767	767e
495 Sul Ross State U.	176	316	320	602	630	796	779	767
496 CUNY Baruch C.	243	154	113	319 i	526	375	375e	762
497 U. Detroit Mercy	2,950	2,555	2,260	1,853	1,870	1,767	1,236	746
498 Lincoln U. (Lincoln University, PA)	818 i	1,135	1,032	1,364	972	709	620	718
499 McNeese State U.	131	131e	25	410	699	639	471	709
500 VA Military Institute	508	508	429	334	394	470	613	695
Total, 1st 500 institutions	22,074,765	22,946,632	24,269,050	25,740,422	27,409,797	29,988,114	32,694,820	36,299,965
501 SUNY C. Geneseo	316	651	461	475	543	686	644	682
502 VA Union U.	--	--	--	671	671e	671 i	671 i	671 i
503 Eastern KY U.	12,539 i	18,580 i	24,621 i	30,662 i	36,708	640	770	666
504 U. WI Oshkosh	330	396	574	636	603	585	670	662
505 Hofstra U.	2,218	726	717	717	716	787	661	661e
506 Augsburg C.	554 i	492 i	430 i	368 i	303	337	497	655
507 Western Carolina U.	228	228	332	442	501	580	763	653
508 U. Portland	333	447	306	282	387	552	719	639
509 Andrews U.	279	366	381	290	290e	444	712	597
510 U. Southern CO	1,464	1,183	884	824	979	724	753	597
Total, 1st 510 institutions	22,093,026	22,969,701	24,297,756	25,775,789	27,451,498	29,994,120	32,701,680	36,306,448
511 Lewis and Clark C.	347 i	386 i	425 i	468	600	529	420	593
512 Saginaw Valley State U.	1,207 i	1,119 i	1,031 i	943 i	855 i	767 i	679 i	591
513 Southern OR U.	243 i	278 i	315	341	320	301	200	585
514 National U. of Health Sciences	--	--	--	--	--	--	--	577
515 Oakwood C.	300	371	718	845	567	567e	567 i	567 i
516 Radford U.	--	--	--	273	181	624	665	562
517 Central State U.	1,789 i	1,786	1,786e	1,497	1,497e	560e	560 i	560 i
518 CT C.	432 i	432 i	432 i	432e	432 i	423 i	478 i	542 i
519 Lawrence Technological U.	155 i	139 i	123 i	104	344	821	681	539
520 C. of the Holy Cross	564	1,419	437	430	252	371	664	532
Total, 1st 520 institutions	22,098,063	22,975,631	24,303,023	25,781,122	27,456,546	29,999,083	32,706,594	36,312,096
521 Dillard U.	145	314	175	175e	175	264	349	528
522 AR Tech U.	485 i	464 i	443 i	419	598	419	526	526e
523 Skidmore C.	211 i	192 i	173 i	151	236	314	250	519
524 Truman State U.	684 i	624	764	754	754e	665 i	576 i	487
525 Middle TN State U.	415	535	465	297	618	733	799	479

See explanatory information and SOURCE at end of table.

TABLE B-32. Total R&D expenditures at universities and colleges, ranked by fiscal year 2002 total R&D expenditures: fiscal years 1995--2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
526 Trinity U.	1,280 i	1,177 i	1,074 i	971 i	867	1,241	1,241e	474
527 Bridgewater State C.	525 i	460 i	395 i	330 i	260	585	371	473
528 Trinity C. (Hartford, CT)	919 i	1,076 i	1,233 i	1,390 i	1,552	1,010	1,010e	464
529 Evergreen State C.	426 i	494 i	562 i	630 i	698 i	766	487	441
530 Oberlin C.	399 i	456 i	513 i	570 i	627 i	691	325	439
Total, 1st 530 institutions	22,103,552	22,981,423	24,308,820	25,786,809	27,462,931	30,005,771	32,712,528	36,316,926
531 Cooper Union	1,515 i	1,515 i	1,515 i	1,515e	144	284	501	427
532 Pace U. all campuses	0	0	0	596	571	289	378	425
533 Eastern OR U.	--	--	--	--	--	--	--	398
534 MA C. of Pharmacy & Health Sciences	275	205	235	89	89e	253 i	417	392
535 NY Institute of Technology all campuses	183	278	325	295	370	390	571	380
536 Denison U.	384 i	367 i	350 i	333 i	314	328	384	373
537 Alliant International U.	--	--	--	--	--	--	517	368
538 C. Wooster	279	293e	219	323	379	593	286	362
539 Southern CT State U.	263 i	245 i	227 i	209 i	188	596	596e	361
540 Salem International U.	--	--	--	752	704	762	355	355e
Total, 1st 540 institutions	22,106,451	22,984,326	24,311,691	25,790,921	27,465,690	30,009,266	32,716,533	36,320,767
541 SUNY C. Cortland	244	373	357	55	82	362	378	353
542 Valparaiso U.	556e	426e	443	571	569	725	391	349
543 Morris Brown C.	3,796	3,652	525	525e	321 i	116	116e	343
544 Sonoma State U.	--	--	--	194	134	150	736	341
545 U. WI River Falls	115	146	262	242	231	152	288	332
546 Western State C. CO	126 i	122 i	118 i	110	158	204	325	321
547 Fayetteville State U.	470 i	503	139	485	265	507	589	311
548 Augustana C. (Sioux Falls, SD)	355 i	348 i	341 i	334 i	327 i	320 i	313 i	304
549 U. NE Kearney	84 i	96 i	108 i	120 i	132 i	146	231	297
550 St. Mary's U. (San Antonio, TX)	350 i	234 i	118 i	0	0	287	362	293
Total, 1st 550 institutions	22,112,547	22,990,226	24,314,102	25,793,557	27,467,909	30,012,235	32,720,262	36,324,011
551 Pitzer C.	544 i	423	240	260	297	383	322	287
552 Ft. Lewis C.	438	235	447	599	243	191	314	286
553 OH Wesleyan U.	319	508	619	197	255	255e	269 i	284
554 SUNY Purchase C.	226 i	196	241	165	188	139	211 i	284
555 Central CT State U.	210 i	211 i	212 i	213 i	214 i	218	259	283
556 Juniata C.	203 i	194 i	185 i	176 i	164	168	171e	283
557 Lake Forest C.	40 i	60 i	80 i	103	190	399	375	283
558 Wilberforce U.	384	323	280	280e	280 i	280 i	280 i	280 i
559 Whitman C.	559 i	522 i	485 i	444	492	483	469	278
560 St. Mary's C. MD	--	--	--	--	--	447	251	274
Total, 1st 560 institutions	22,115,470	22,992,898	24,316,891	25,795,994	27,470,232	30,015,198	32,723,183	36,326,833
561 NJ City U.	--	--	--	--	--	--	--	267
562 TX A&M U. Commerce	282	263	290	361	168	327	262	263
563 Manhattan C.	939 i	814 i	689 i	563	485	509	509e	257
564 Abilene Christian U.	414 i	387 i	360 i	330	272	252	319	254
565 Willamette U.	--	--	--	340	58	266	344	254

See explanatory information and SOURCE at end of table.

TABLE B-32. Total R&D expenditures at universities and colleges, ranked by fiscal year 2002 total R&D expenditures: fiscal years 1995--2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
566 U. Findlay, The	--	--	--	--	--	350	182	250
567 U. of St. Thomas (St. Paul, MN)	281 i	289 i	297 i	306	78	143 i	209	243
568 U. WI Whitewater	287	356	395	282	148	272	260	236
569 SUNY C. Fredonia	382	204	154	118	92	194	224	235
570 Widener U. all campuses	0	0	0	0	70	208	208e	231 i
Total, 1st 570 institutions	22,118,055	22,995,211	24,319,076	25,798,294	27,471,603	30,017,719	32,725,700	36,329,323
571 Providence C.	36	70	44	62	86	86e	154 i	223
572 Kennesaw State U.	89	132	158	132	142	249	298	221
573 Northeastern IL U.	1,513	282	530	186	101	184	274	216
574 Claflin C.	540	764	1,254	1,403	555	555e	2,074	203
575 Fairleigh Dickinson U. all campuses	140e	140	775	394	356	158	223	190
576 WV School of Osteopathic Medicine	121	128	146	146	99	132	129	182
577 Iona C.	135	137	145	151 i	157 i	163 i	169 i	177
578 Northern KY U.	309 i	279 i	249 i	219 i	185	115	142 i	169
579 Pacific U.	0	0	0	0	0	264	299	157
580 Adelphi U.	319	317	433	252	254	169	137	152 i
Total, 1st 580 institutions	22,121,257	22,997,460	24,322,810	25,801,239	27,473,538	30,019,794	32,729,599	36,331,213
581 East Stroudsburg U. PA	415 i	532 i	649 i	766 i	887e	642	962	151
582 Southeast MO State U.	610 i	521 i	432 i	343 i	250e	233	223	141
583 New C. FL	--	--	--	--	--	--	--	132
584 Regis U.	105 i	111 i	117 i	124	93	208	208e	119
585 U. Dallas	0	63	67	490	194	60	81	116
586 Point Loma Nazarene C.	162 i	162 i	162 i	162 i	162 i	165	186	102
587 Shaw U.	56	115	147	110	100	100e	100 i	100 i
588 Wilkes U.	--	--	--	--	--	--	--	95
589 Monmouth U.	776	630	708	382	357	357e	118	85
590 Ferris State U.	--	--	--	78	15	15e	64	64e
Total, 1st 590 institutions	22,123,381	22,999,594	24,325,092	25,803,694	27,475,596	30,021,574	32,731,541	36,332,318
591 WV State C.	40	10	256	119	55	55e	63e	63 i
592 Knox C.	529 i	474 i	419 i	364 i	309 i	254	153	60
593 Pontifical Catholic U. PR, The	20	20e	86	111	131	85	89	54
594 AK Pacific U.	--	--	--	--	--	--	--	43
595 Jarvis Christian C.	219	102	83	55	56	55	55e	30
596 Wentworth Institute of Technology	1,155	1,234	773	1,146	817	452	62	24
597 La Salle U.	166 i	329	215	157	244	126	294	20
598 Wiley C.	--	--	--	0	0	0	0	15
599 San Francisco State U.	5,307 i	5,231 i	5,155 i	5,079 i	5,000e	5,223e	5,223e	14
600 Antioch U. all campuses	81	0	0	0	0	0	0	0
Total, 1st 600 institutions	22,130,898	23,006,994	24,332,079	25,810,725	27,482,208	30,027,824	32,737,480	36,332,641
601 Azusa Pacific U.	--	--	--	--	--	0e	0	0
602 Biola U.	0	0	0	0	0	0	0	0
603 Bluefield State C.	--	--	--	15	0	0	0	0
604 CA Institute of Integral Studies	0	0	0	0	0	0	0	0
605 Coppin State C.	208	116	15	6	11	0	0	0

See explanatory information and SOURCE at end of table.

TABLE B-32. Total R&D expenditures at universities and colleges, ranked by fiscal year 2002 total R&D expenditures: fiscal years 1995--2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
606 Forest Institute of Professional Psychology	8	5	0	0	0	0	0	0
607 Golden Gate U.	0	0	0	0	0	0	0	0
608 Johnson C. Smith U.	1,307	1,307	1,546	4,299	8,659	287	195	0
609 Le Moyne-Owen C.	--	--	--	1,451	1,053	1,700	1,268	0
610 Pepperdine U.	0	0	0	0	0	0	0	0
Total, 1st 610 institutions	22,132,421	23,008,422	24,333,640	25,816,496	27,491,931	30,029,811	32,738,943	36,332,641
611 Philander Smith C.	145	73	73	73e	72	72e	0	0
612 Rust C.	332	0	0	317	114	138	0	0
613 Selma U.	495 i	250	210	210e	116	0	0e	0
614 Talladega C.	0	0	0	0e	0	0	0	0
615 Union Institute, The	1,155	1,173	1,024 i	875	1,023	1,217	1,217e	0
616 U. MD Eastern Shore	1,880	1,980	2,187	2,265	2,508	3,895	5,626	0
617 U. MO system administration	205	196	209	270	291	219	0	0
Total, 1st 617 institutions	22,136,633	23,012,094	24,337,343	25,820,506	27,496,055	30,035,352	32,745,786	36,332,641
Total, all other sampled institutions	33,164	32,745	31,380	33,206	32,270	27,389	21,301	0

1 Johns Hopkins University includes the Applied Physics Laboratory, with $560 million in total R&D expenditures.
2 These data do not include R&D expenditures at university-associated federally funded research and development centers. See tables B-71 and B-72.

-- = not available.
e = estimated.
i = imputed.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-33. Federally financed R&D expenditures at universities and colleges, ranked by fiscal year 2002 federally financed R&D expenditures: fiscal years 1995--2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
Total, all institutions	13,331,310	13,839,651	14,313,608	15,149,731	16,086,023	17,517,599	19,212,719	21,833,953
1 Johns Hopkins U., The [1]	706,049	710,119	724,526	752,983	770,580	793,266	879,741	1,022,510
2 U. WA	291,284	312,695	320,784	342,291	368,112	389,622	435,103	487,059
3 U. MI all campuses	275,956	281,062	296,028	311,450	334,226	364,033	396,117	444,255
4 Stanford U.	273,157	295,373	332,272	342,426	353,947	367,083	384,468	426,620
5 U. PA	200,895	216,167	217,125	247,914	279,013	312,434	351,996	397,587
6 U. CA Los Angeles	201,773	236,635	215,937	234,005	251,999	274,162	312,858	366,762
7 U. CA San Diego	284,445	291,917	238,569	263,103	292,007	326,037	343,276	359,383
8 Columbia U. in the City of New York	206,495	195,652	212,180	229,723	240,158	283,163	317,928	356,749
9 U. WI Madison	229,381	233,174	233,760	240,513	249,212	278,629	304,009	345,003
10 U. CO all campuses	169,666	177,517	192,201	228,342	244,686	300,667	308,643	340,466
Total, 1st 10 institutions	2,839,101	2,950,311	2,983,382	3,192,750	3,383,940	3,689,096	4,034,139	4,546,394
11 Harvard U.	203,965	203,047	222,612	251,876	266,019	281,699	300,414	336,607
12 MA Institute of Technology [2]	273,543	271,544	311,396	310,741	308,921	306,668	304,319	330,409
13 U. CA San Francisco	224,271	221,864	206,749	219,630	233,181	248,878	277,489	327,393
14 U. Pittsburgh all campuses	144,487	149,960	160,833	168,511	194,618	228,155	268,571	306,913
15 Washington U. St. Louis	146,921	155,197	186,993	187,173	218,598	254,148	284,928	303,441
16 U. MN all campuses	194,819	198,927	200,149	204,741	207,761	229,958	264,289	295,301
17 PA State U. all campuses	187,481	190,688	185,206	186,274	199,105	226,074	245,951	284,706
18 Yale U.	174,868	176,994	189,124	205,046	213,404	232,019	250,702	274,304
19 Cornell U. all campuses [2]	207,391	203,082	205,521	204,187	234,792	229,872	240,466	270,578
20 U. Southern CA	163,606	179,281	191,809	190,547	199,619	210,872	246,207	266,645
Total, 1st 20 institutions	4,760,453	4,900,895	5,043,774	5,321,476	5,659,958	6,137,439	6,717,475	7,542,691
21 Duke U.	148,526	149,631	155,894	172,532	186,757	204,180	218,109	261,356
22 Baylor C. of Medicine	94,197	92,294	97,829	110,610	141,111	193,249	234,394	259,475
23 U. NC Chapel Hill	156,626	157,034	153,985	171,505	182,935	194,794	221,615	254,571
24 U. TX Austin	143,939	147,808	151,954	165,082	164,913	178,889	195,184	219,158
25 U. CA Berkeley [2]	157,826	168,171	159,275	171,747	191,025	208,338	208,080	217,297
26 U. AL Birmingham, The	107,440	125,804	150,501	166,830	165,223	175,309	194,625	216,221
27 U. IL Urbana-Champaign	139,078	145,514	156,366	171,250	185,767	193,490	195,316	214,323
28 U. AZ	168,791	154,004	152,221	161,999	178,126	187,161	199,484	211,772
29 CA Institute of Technology [2]	120,723	142,474	164,225	177,748	195,303	196,877	193,554	199,944
30 U. Rochester [2]	125,897	112,933	118,477	130,773	132,852	150,593	166,945	195,298
Total, 1st 30 institutions	6,123,496	6,296,562	6,504,501	6,921,552	7,383,970	8,020,319	8,744,781	9,792,106
31 U. MD College Park	94,071	99,688	102,928	129,198	145,081	136,605	145,515	194,095
32 Emory U.	92,724	95,237	108,522	118,045	132,816	144,914	170,317	186,083
33 U. Chicago [2]	104,587	114,123	121,683	125,982	135,720	140,872	155,566	183,830
34 Case Western Reserve U.	107,192	109,901	120,992	132,274	140,178	150,586	158,852	181,888
35 U. IA	103,115	105,646	108,534	115,312	122,638	140,764	155,249	180,743
36 Northwestern U.	90,387	100,810	108,292	127,911	132,647	150,238	158,129	178,607
37 OH State U. all campuses	122,660	118,811	122,582	124,177	135,216	132,219	161,092	177,883
38 U. CA Davis	122,645	130,188	104,943	114,018	124,463	141,740	154,937	176,644
39 Vanderbilt U.	92,185	95,684	98,744	106,325	116,887	129,986	146,230	172,858
40 Boston U.	83,473	87,946	97,522	104,428	123,390	133,730	150,771	171,438
Total, 1st 40 institutions	7,136,535	7,354,596	7,599,243	8,119,222	8,693,006	9,421,973	10,301,439	11,596,175

See explanatory information and SOURCE at end of table.

TABLE B-33. Federally financed R&D expenditures at universities and colleges, ranked by fiscal year 2002 federally financed R&D expenditures: fiscal years 1995--2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
41 U. FL	79,361	86,973	94,328	106,510	122,296	120,374	135,421	167,108
42 GA Institute of Technology all campuses	104,892	116,155	112,544	113,643	112,861	126,164	143,836	165,680
43 TX A&M U. all campuses	136,734	148,675	145,066	144,938	149,151	149,639	149,382	163,488
44 U. TX Southwestern Medical Ctr. Dallas	78,892	81,468	89,357	97,200	101,996	109,165	131,820	155,258
45 U. VA all campuses	85,244	75,256	82,488	99,173	107,856	115,684	122,868	152,358
46 U. Cincinnati all campuses	55,107	72,543	78,292	90,307	100,325	110,296	128,049	150,166
47 NY U.	93,759	90,010	94,117	101,426	111,124	117,163	129,897	149,995
48 U. IL Chicago	57,528	58,991	70,739	73,797	86,406	101,943	125,109	143,183
49 U. UT	83,554	93,788	99,322	100,722	111,716	124,344	127,253	142,625
50 Carnegie-Mellon U. [2]	84,758	91,830	91,527	95,046	90,408	91,191	97,463	137,967
Total, 1st 50 institutions	7,996,364	8,270,285	8,557,023	9,141,984	9,787,145	10,587,936	11,592,537	13,124,003
51 IN U. all campuses	86,041	90,881	95,931	95,840	102,262	107,577	116,781	132,759
52 OR Health Sciences U.	49,429	51,338	68,637	82,146 i	95,655 i	109,165	111,671	130,231
53 SUNY Buffalo all campuses	75,713	87,813	78,092	76,037	85,490	96,410	96,595	128,842
54 Mt. Sinai School of Medicine	58,991	61,599	60,914	69,995	84,624	98,188	109,344	125,979
55 MI State U.	77,499	77,243	82,977	81,146	89,835	97,112	112,359	122,595
56 U. Miami	97,111	96,716	101,516	101,492	101,883	106,633	111,803	121,171
57 U. TX M. D. Anderson Cancer Ctr.	44,711	42,794	49,702	63,074	69,413	81,872	94,053	117,633
58 U. MD Baltimore	59,596	65,211	72,100	78,037	84,516	91,212	99,091	117,017
59 U. CA Irvine	69,655	72,994	64,293	66,602	75,505	88,274	101,735	115,548
60 Yeshiva U.	72,132e	73,396	77,936	80,000	89,680	101,631	107,800	114,268
Total, 1st 60 institutions	8,687,242	8,990,270	9,309,121	9,936,353	10,666,008	11,566,010	12,653,769	14,350,046
61 CO State U.	75,216	74,930	79,393	80,451	91,943	101,429	101,308	112,650
62 U. HI Manoa	44,238	66,902	72,421	86,886	93,418	95,419	97,716	110,882
63 SUNY Stony Brook all campuses	76,505	79,570	86,568	91,531	93,937	96,641	93,265	108,122
64 Purdue U. all campuses	93,256	91,632	91,969	92,844	95,708	92,010	98,151	107,477
65 U. NM all campuses	90,897	76,850	76,978	84,365	84,976	100,442	109,505	104,252
66 U. KY all campuses	50,014	51,450	62,128	60,760	66,184	73,858	86,239	100,426
67 U. TX Houston Health Science Ctr.	54,762	61,456	67,205	70,446	71,288	79,665	88,545	98,676
68 LA State U. all campuses	61,456	64,524	65,257	67,090	75,831	89,007	94,625	97,928
69 Princeton U. [2]	63,903	69,386	69,667	69,005	72,974	74,681	78,620	97,724
70 Wayne State U.	46,246	46,264	53,707	57,646	57,610	64,320	79,448	95,910
Total, 1st 70 institutions	9,343,735	9,673,234	10,034,414	10,697,377	11,469,877	12,433,482	13,581,191	15,384,093
71 U. MA Worcester	36,970	40,198	43,350	53,766	55,516	64,212	79,453	93,992
72 U. CT all campuses	50,096	53,009	49,503	53,189	55,496	66,144	70,013	93,326
73 Wake Forest U.	50,719	55,845	54,287	56,705	60,293	65,585	78,021	91,738
74 OR State U.	68,687	79,977	80,131	82,416	81,649	80,398	84,854	91,683
75 Rutgers The State U. NJ all campuses	72,567	67,588	68,225	69,829	75,664	79,711	77,156	91,205
76 U. of Medicine and Dentistry NJ	45,734	47,505	57,471	59,828	61,730	75,318	86,054	90,235
77 U. TN system	76,294	73,724	74,049	69,793	70,187	72,059	78,611	88,344
78 Dartmouth C.	39,059	39,682	43,154	45,053	46,741	56,369	69,844	87,255
79 Georgetown U.	74,328	81,704	84,198	84,801	83,972	98,836	93,626	87,087
80 U. South FL	29,558	29,751	31,068	35,930	42,005	50,557	58,826	84,108
Total, 1st 80 institutions	9,887,747	10,242,217	10,619,850	11,308,687	12,103,130	13,142,671	14,357,649	16,283,066

See explanatory information and SOURCE at end of table.

TABLE B-33. Federally financed R&D expenditures at universities and colleges, ranked by fiscal year 2002 federally financed R&D expenditures: fiscal years 1995--2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
81 U. TX Health Science Ctr. San Antonio	54,433	51,203	53,478	51,954	56,904	65,251	71,153	83,761
82 VA Polytechnic Institute & State U.	79,074	80,319	87,657	82,734	75,386	71,127	77,384	82,976
83 U. KS all campuses	42,209	41,858	46,733	50,567	57,272	68,950	74,494	82,663
84 UT State U.	48,431	43,764	49,594	54,903	54,433	57,378	74,251	79,393
85 Thomas Jefferson U.	49,335	51,475	49,091	51,728	56,369	67,448	64,881	79,217
86 Woods Hole Oceanographic Institution	72,759	61,820	66,386	64,765	59,534	67,036	75,670	78,458
87 U. CA Santa Barbara	63,443	73,400	64,915	68,680	74,026	80,754	76,828	78,370
88 U. TX Medical Branch Galveston	33,204	38,323	42,006	48,588	55,061	61,357	64,682	78,100
89 U. GA	57,509	56,254	54,364	54,712	56,080	62,678	66,913	78,086
90 U. MO-Columbia	32,420	38,938	43,335	45,448	53,875	65,420	68,435	77,742
Total, 1st 90 institutions	10,420,564	10,779,571	11,177,409	11,882,766	12,702,070	13,810,070	15,072,340	17,081,832
91 MS State U.	33,158	34,637	34,928	42,004	46,528	53,808	65,493	77,521
92 Medical C. WI	31,098	34,527	39,364	43,831	47,087	55,034	64,003	76,241
93 Medical U. SC	36,417	40,637	37,790	36,473	30,997	41,432	60,543	75,803
94 NC State U.	68,675	74,485	69,473	79,533	66,310	77,328	95,875	75,204
95 Tufts U.	50,481	53,508	55,421	61,167	62,836	64,677	71,669	73,236
96 IA State U. [2]	58,766	54,904	52,938	51,196	54,179	59,976	62,024	71,419
97 FL State U.	45,947	39,527	52,945	50,451	55,666	56,830	57,075	70,456
98 NM State U. all campuses	57,210	53,552	57,165	56,587	56,875	57,073	61,124	70,314
99 U. OK all campuses	37,112	42,679	45,756	54,451	57,589	60,542	60,264	69,388
100 Brown U.	37,432	42,139	43,664	44,412	45,276	49,943	58,367	68,215
Total, 1st 100 institutions	10,876,860	11,250,166	11,666,853	12,402,871	13,225,413	14,386,713	15,728,777	17,809,629
101 Rockefeller U.	38,993	37,369	43,979	43,845	45,010	45,211	55,362	67,559
102 U. AK Fairbanks all campuses	37,285	30,351	28,127	31,505	34,647	46,605	55,287	66,169
103 VA Commonwealth U.	46,694	45,454	44,982	48,167	48,175	52,137	57,315	65,028
104 Tulane U.	60,837	49,720	49,708	52,924	50,779	52,080	55,669	64,824
105 AZ State U. main campus	35,215	38,947	37,700	41,359	53,905	49,935	56,616	64,407
106 George Washington U.	28,031	30,490	34,182	45,072	49,944	49,627	51,757	58,729
107 U. VT	32,932	31,521	34,042	31,460	36,085	39,861	48,810	58,280
108 WA State U.	49,043	48,807	45,030	44,510	44,610	48,441	48,660	56,360
109 U. MA Amherst	32,126	37,969	40,925	43,196	39,877	44,712	49,576	54,770
110 U. SC all campuses	44,292	51,269	37,005	42,586	48,490	51,872	51,983	53,403
Total, 1st 110 institutions	11,282,308	11,652,063	12,062,533	12,827,495	13,676,935	14,867,194	16,259,812	18,419,158
111 U. NE Lincoln	36,897	32,352	41,269	41,888e	36,977	37,831	43,877	51,405
112 U. NH	21,072	23,305	24,128	25,913	30,586	38,921	45,223	50,829
113 U. MS all campuses	17,466	15,571	15,696	16,463	19,053 i	28,107	40,416 i	50,092 i
114 WV U.	30,258	30,800	29,443	24,985	26,264	28,013	29,440	49,394
115 U. DE	27,352	29,509	32,031	33,688	34,628	37,716	41,830	48,183
116 Clemson U.	28,734	28,109	28,092	28,199	27,064	31,304	48,560	47,174
117 U. RI	33,927 i	34,829 i	35,733	33,308	36,207	38,538	43,161	45,453
118 Rush U.	18,124	22,480	24,382	28,444	31,119	32,573	37,301	44,756
119 Temple U.	28,303	28,720	26,374	28,793	29,734	38,213	41,643	44,577
120 Naval Postgraduate School	27,155	29,873	31,618	33,308	33,308e	36,476 i	40,121 i	44,379 i
Total, 1st 120 institutions	11,551,596	11,927,611	12,351,299	13,122,484	13,981,875	15,214,886	16,671,384	18,895,400

See explanatory information and SOURCE at end of table.

TABLE B-33. Federally financed R&D expenditures at universities and colleges, ranked by fiscal year 2002 federally financed R&D expenditures: fiscal years 1995--2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
121 KS State U.	25,266	24,769	25,781	27,001	28,102	31,185	33,998	43,988
122 Auburn U. all campuses	27,544	31,401	27,412	27,706	27,058	31,515	40,097	42,432
123 SUNY Albany	24,468	48,395	41,190	33,894	46,242	62,059	46,671	40,497
124 U. Dayton	37,842	34,413	36,196	36,329	30,755	31,717	34,102	40,191
125 MT State U.-Bozeman	17,233	17,667	19,707	23,982	26,231	30,564	34,857	39,986
126 U. NV, Reno	21,377	20,971	20,813	20,383	24,587	26,267	31,386	39,958
127 Rice U.	26,429	33,238	37,935	34,772	35,012	35,144	35,682	39,739
128 Charles R. Drew U. of Medicine & Science	10,500	15,288	16,052e	16,052e	22,212	21,969	27,415	39,259
129 U. Louisville	9,782	13,306	13,521	15,067	15,536	17,713	25,116	38,978
130 U. OR	23,789	26,411	26,020	27,041	27,336	30,793	32,232	37,177
Total, 1st 130 institutions	11,775,826	12,193,470	12,615,926	13,384,711	14,264,946	15,533,812	17,012,940	19,297,605
131 U. AL Huntsville, The	25,417	26,141	21,731	23,772	25,166	25,939	30,625	35,660
132 Howard U.	21,137	26,253	25,884	21,501	21,658	25,292	27,848	33,949
133 U. ID	18,239	16,481	17,416 i	18,352	24,263	23,014	26,548	33,465
134 U. of Notre Dame	17,424	18,886	19,173	23,053	23,614	27,362	29,801	33,285
135 U. CA Santa Cruz	26,043	31,727	24,005	29,881	25,084	25,959	29,201	32,901
136 Syracuse U. all campuses	19,341	18,361	23,780 i	29,200	30,050	29,620	30,036	32,704
137 U. CA Riverside	25,127	27,727	24,006	22,999	19,994	21,085	25,713	32,305
138 FL International U.	13,030	13,415	13,828	14,243	15,757	20,296	23,940	32,057
139 George Mason U.	14,939	16,430	14,652	17,268	19,492	20,669	25,992	31,890
140 U. Houston	22,633	25,448	21,695	22,018	20,443	21,365	21,876	31,455
Total, 1st 140 institutions	11,979,156	12,414,339	12,822,096	13,606,998	14,490,467	15,774,413	17,284,520	19,627,276
141 St. Louis U. all campuses	19,351	21,483	23,218	23,341	23,722	26,453	28,117	31,215
142 OK State U. all campuses	18,951	25,034	21,455	23,220	23,179	24,770	25,636	31,100
143 Drexel U.	9,444	11,613	10,545	10,929	12,914	14,292	20,159	30,232
144 U. Central FL	20,077	18,714	13,361	13,502	16,048	13,801	22,342	29,929
145 U. MD Baltimore County	7,131	8,135	9,816	12,618	15,624	20,244	23,695	29,376
146 Brandeis U.	22,741	23,233	25,233	28,098	29,423	26,444	30,031	29,006
147 U. NE Medical Ctr.	13,375	14,029	13,990	15,663	17,167	19,878	22,497	28,602
148 TX Tech U.	11,450	13,013	14,901	17,481	20,242	21,480	22,967	28,202
149 Loyola U. (Chicago, IL)	20,209 i	16,831	14,771	17,685	17,588	20,695	26,474	27,678
150 U. AR main campus	17,231	16,019	15,772	16,156	15,851	20,778	23,172	27,588
Total, 1st 150 institutions	12,139,116	12,582,443	12,985,158	13,785,691	14,682,225	15,983,248	17,529,610	19,920,204
151 U. AR for Medical Sciences	16,117	16,796	19,249	21,857	26,392	29,962	34,219	27,491
152 U. AL, The	12,236	12,238	13,118	14,909	17,601	19,486	22,183	26,900
153 MCP Hahnemann U.	23,905	27,723	48,062	61,102	17,281	27,379	22,944	26,619
154 Rensselaer Polytechnic Institute	24,250	24,748	22,785	21,774	22,803	25,555	25,894	26,490
155 NJ Institute of Technology	15,109	20,561	21,287	21,127	21,127	17,381	18,530	25,641
156 SUNY Health Science Ctr. Brooklyn	18,374	18,685 i	18,996	18,318	21,053	22,860	22,860e	25,495 i
157 San Diego State U.	16,436	17,181	20,237	19,721	19,724	22,802	23,621	25,223
158 U. ND all campuses	16,157	23,976	17,775	13,404	13,615	13,880	15,743	25,004
159 Northeastern U.	17,113	14,706	16,321	21,454	22,776	26,916	23,532	24,295
160 U. PR Medical Sciences Campus	12,433	12,191	12,978	11,843	13,971	16,657	19,433	23,931
Total, 1st 160 institutions	12,311,246	12,771,248	13,195,966	14,011,200	14,878,568	16,206,126	17,758,569	20,177,293

See explanatory information and SOURCE at end of table.

TABLE B-33. Federally financed R&D expenditures at universities and colleges, ranked by fiscal year 2002 federally financed R&D expenditures: fiscal years 1995--2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
161 U. ME	15,789	16,211	15,066	13,028	19,163	24,412	23,873	23,732
162 Medical C. GA	11,007	11,338	11,904	13,127	13,991	15,210	21,116	23,317
163 Boston C.	9,990	11,137	11,207	12,778	14,492	16,673	20,123	22,827
164 Desert Research Institute	15,867	14,600	13,900	15,400	16,552	19,923	22,018	22,760
165 U. MT, The	10,149	11,591	11,554	11,748	14,627	18,378	19,194	22,612
166 TX A&M U. System Health Science Ctr.	--	--	--	--	--	14,321	18,384	22,417
167 U. Southern MS	7,500	7,587	7,766	9,536	14,124	15,084	18,061	22,398
168 U. NV, Las Vegas	10,464	11,142	9,221	9,713	10,248	13,815	15,681	22,367
169 Morehouse School of Medicine	6,996	11,747	12,099	12,461	12,948	15,419	18,127	21,919
170 Jackson State U.	4,461 i	4,702	3,960	5,326	7,925	10,690	22,750	21,721
Total, 1st 170 institutions	12,403,469	12,871,303	13,292,643	14,114,317	15,002,638	16,370,051	17,957,896	20,403,363
171 FL A&M U.	19,430	20,118	22,547	15,726	20,693	16,278	22,477	21,592
172 ND State U. all campuses	11,684	11,683	6,432	9,787	12,308	15,463	15,207	21,414
173 Meharry Medical C.	10,208	11,004	11,004e	11,004e	9,192	9,192e	14,822 i	20,453
174 Loma Linda U.	5,416	5,878	8,061	7,834	12,217	18,811	19,462 i	20,114
175 U. WY	15,373	14,991	15,003	17,806	19,109	16,556	20,017	20,017e
176 NY Medical C.	13,778	11,657	11,866	13,639	14,029	17,975	18,344	19,318
177 GA State U.	6,277	5,818	7,544	11,284	14,310	12,090	13,575	18,967
178 NM Institute of Mining and Technology	8,447	7,205	10,496	8,959	10,719	8,652	13,255	18,864
179 C. of William and Mary all campuses	11,731	13,020	10,911	11,097	11,892	13,031	15,288	18,007
180 MI Technological U.	12,807	12,603	12,941	13,938	16,107	16,650	17,620	17,973
Total, 1st 180 institutions	12,518,620	12,985,280	13,409,448	14,235,391	15,143,214	16,514,749	18,127,963	20,600,082
181 Catholic U. America	6,467	5,901	6,910	7,161	11,064	7,680	13,308	17,925
182 OH U. all campuses	7,587	8,046	9,790	10,323	10,544	11,695	12,898	17,677
183 Old Dominion U.	7,968	9,266	10,736	12,346	13,706	14,908	15,280	17,170
184 U. TX El Paso	9,511	10,471	12,873	10,758	18,292	16,416	16,167	16,457
185 Wright State U. all campuses	9,619	9,502	10,001	10,832	12,365	12,543	15,417	16,070
186 U. South AL	9,135	9,747	9,709	9,451	9,451e	8,276	8,276e	15,922
187 San Jose State U.	11,825 i	11,825 i	11,825 i	11,825e	11,825e	11,825e	14,301	15,777
188 U. MO-Rolla	5,834	7,542	8,080	7,934	8,731	9,804	11,929	15,749
189 FL Atlantic U.	9,643	6,500	7,653	9,582	11,036	12,359	14,099	15,566
190 Clark Atlanta U.	15,821	25,345	25,943	24,079	12,116	16,170	14,354	15,325
Total, 1st 190 institutions	12,612,030	13,089,425	13,522,968	14,349,682	15,262,344	16,636,425	18,263,992	20,763,720
191 U. MA Lowell	8,097	10,257	11,560	12,259	10,354	9,905	11,196	14,932
192 CUNY Hunter C.	6,152	6,083	6,895	6,414	7,526	8,650	10,922	14,573
193 U. Memphis, The	4,565	4,954	5,413	5,849	6,364	11,177	11,012	14,072
194 Lehigh U.	21,410	22,409	14,882	13,019	13,161	12,726	13,961	13,519
195 SUNY Upstate Medical U.	6,854	6,764	7,188	6,487	7,889	8,461	8,815	13,404
196 CUNY City C.	15,512	16,169	15,221	14,437	12,393	13,059	13,022	13,319
197 CO School of Mines	8,847 i	9,534	9,330	8,694	10,704	11,995	12,314	13,230
198 U. MD Ctr. for Environmental Science	5,952	5,998	6,240	7,440	8,116	10,805	12,105	13,080
199 Eastern VA Medical School	9,824	10,203	10,618	9,449	11,354	12,114	11,389	13,077
200 U. LA Lafayette	2,307	2,936	4,699	5,834	9,430	12,164	12,130	12,925
Total, 1st 200 institutions	12,701,550	13,184,732	13,615,014	14,439,564	15,359,635	16,747,481	18,380,858	20,899,851

See explanatory information and SOURCE at end of table.

TABLE B-33. Federally financed R&D expenditures at universities and colleges, ranked by fiscal year 2002 federally financed R&D expenditures: fiscal years 1995--2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
201 Brigham Young U. all campuses	8,615	8,752e	9,223 i	9,694	11,414	10,378	11,659	12,900
202 Medical C. OH	9,243	9,559	9,766	8,107	9,219	9,944	11,362	12,006
203 NC Agricultural and Technical State U.	12,501	12,521	13,362	12,924	12,454	11,187	11,937	11,953
204 Portland State U.	4,659	5,675	5,960	6,881	9,313	11,217	11,341	11,914
205 U. TX Dallas	6,404 i	5,583	6,719	8,115	7,700	7,049	7,049e	11,624
206 U. WI Milwaukee	7,749	8,026	8,156	8,936	9,190	8,425	11,089	11,461
207 IL Institute of Technology	9,119	11,183	11,668	9,946	9,777	10,926	10,917	11,277
208 TN State U.	6,478	7,983	7,569	7,978	8,522	8,873	10,210	11,218
209 Northern AZ U.	6,469	6,938	8,176	6,812	7,111	7,842	9,616	10,873
210 U. MO-Kansas City	4,506	5,087	5,380	6,199	7,206	7,490	8,176	10,795
Total, 1st 210 institutions	12,777,293	13,266,039	13,700,993	14,525,156	15,451,541	16,840,812	18,484,214	21,015,872
211 Southern IL U. Carbondale	10,100	8,836	8,632	7,801	7,660	10,130	10,868	10,789
212 AL A&M U.	8,075	8,249 i	8,423e	10,518	8,558	7,056	8,883 i	10,710
213 U. of the VI	2,040 i	2,428	2,428e	2,428e	1,957	1,957e	6,288 i	10,620
214 U. MD Biotechnology Institute	7,037	7,529	8,719	11,789	13,911	11,157	11,053	10,603
215 Uniformed Services U. of the Health Sciences	25,858	24,621	9,218	7,547	9,696	11,023	10,105	10,294
216 Hampton U.	6,130	3,854	7,777	6,801	7,168	8,994	8,377	10,058
217 U. NC Wilmington	4,440 i	4,326 i	4,212 i	4,098	4,431	5,336	7,242	9,950
218 Western MI U.	2,753	3,336	3,618	4,023	4,165	4,584	6,192	9,913
219 U. Akron all campuses	4,231	4,793	5,146	4,042	7,140	7,081	8,672	9,537
220 Marshall U. Graduate C.	206	234	180	25	66	5,618	5,980	9,502
Total, 1st 220 institutions	12,848,163	13,334,245	13,759,346	14,584,228	15,516,293	16,913,748	18,567,874	21,117,848
221 Kent State U. all campuses	6,506	7,729	7,577	8,251	8,212	7,736	8,158	9,427
222 SD State U.	5,622	5,500	5,650	5,812	6,086	7,448	8,456	9,115
223 U. Toledo	3,187	3,506e	2,937	5,366	5,682	6,312	6,701	8,996
224 SUNY Binghamton	5,659	5,661	6,218	6,205	5,761	6,319	6,392	8,959
225 Albany Medical C.	8,686	6,691	5,632	6,545	7,437	7,691	8,562	8,901
226 U. PR Mayaguez Campus	18,048	19,568	21,052	21,903	23,784	11,837	9,015	8,865
227 Mercer U. all campuses	9,178	10,832	10,741	12,043	12,657	11,350	9,076	8,607
228 U. HI Hilo	--	--	--	--	--	--	--	8,499
229 U. Denver	9,877	7,415	7,888	9,385	9,081	7,439	9,248	8,386
230 U.S. Air Force Academy	2,786 i	3,201 i	3,616 i	4,033	3,699	4,505	5,009	8,163
Total, 1st 230 institutions	12,917,712	13,404,348	13,830,657	14,663,771	15,598,692	16,984,385	18,638,491	21,205,766
231 Stevens Institute of Technology	8,677	9,222	6,174	6,667	7,084	8,785	8,094	8,094e
232 Miles C.	--	--	--	--	--	--	--	7,943
233 Southern U. A&M C. all campuses	7,480	7,724	7,774	6,983	6,689	6,418	7,059 i	7,903 i
234 Rochester Institute of Technology	1,731	2,545	2,523	2,339e	2,690	2,664	5,612	7,868
235 U. TX Arlington	8,692	14,804	26,829	11,294	6,089	5,106	9,413	7,848
236 U. North TX Health Science Ctr. Ft. Worth	3,985	4,847	5,273	5,645	5,370	5,799	6,562	7,770
237 CA State U. Los Angeles	2,253 i	1,806 i	1,359 i	912 i	463	8,344	5,365	7,728
238 Prairie View A&M U.	6,284	10,325	9,315	9,612	8,675	7,679	7,094	7,712
239 Tuskegee U.	7,200	8,231	29,930	26,894	6,942	6,694	7,259	7,703
240 U. Houston-Clear Lake	3,753 i	2,924 i	2,095 i	1,266	5,387	6,383	10,629	7,460
Total, 1st 240 institutions	12,967,767	13,466,776	13,921,929	14,735,383	15,648,081	17,042,257	18,705,578	21,283,795

See explanatory information and SOURCE at end of table.

TABLE B-33. Federally financed R&D expenditures at universities and colleges, ranked by fiscal year 2002 federally financed R&D expenditures: fiscal years 1995--2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
241 U. MA Dartmouth	3,221	3,433	2,884	3,731	3,983	3,228	4,928	7,142
242 U. TX San Antonio	3,398 i	4,111	11,553	5,112	5,463	7,441	8,012	7,111
243 SD School of Mines and Technology	3,369	3,278	2,990	3,221	3,300	4,127	4,417	6,950
244 VA State U.	2,599	2,735	3,453	2,792	2,061	3,602	4,246	6,895
245 U. Tulsa	3,441	5,104	4,190	4,002	5,272	5,498	7,341	6,806
246 CA State U. Northridge	1,504 i	1,439 i	1,374 i	1,309	2,324	3,182	3,182e	6,786
247 Wichita State U.	2,551	2,196	2,602	2,646	3,260	5,228	5,726	6,687
248 Creighton U.	4,474	5,046	5,129	4,096	4,929	5,541	7,275	6,594
249 Universidad Central Del Caribe	2,387	2,353	2,072	3,208 i	4,345	5,347	6,622	6,470
250 KY State U.	2,920	2,761	2,139	703	703e	2,179 i	3,655	6,036
Total, 1st 250 institutions	12,997,631	13,499,232	13,960,315	14,766,203	15,683,721	17,087,630	18,760,982	21,351,272
251 East Carolina U.	4,964	4,079	3,904	4,027	4,832	4,388	5,188	6,030
252 Southern Methodist U.	4,352	6,007	4,543	4,836	6,387	6,302	5,587	6,026
253 Xavier U. LA	8,979	5,106	5,473	5,355	3,240	3,174	4,666	6,019
254 U. North TX	3,696	3,492	3,703	2,621	2,617	3,618	5,401	6,015
255 CA State Polytechnic U. San Luis Obispo	2,015 i	2,658 i	3,301 i	3,948	7,673	7,605	6,153	5,968
256 Teachers C. Columbia U.	226 i	262	560	2,900	4,119	5,613	5,617	5,939
257 U. NC Charlotte	3,043 i	3,411 i	3,779 i	4,150	4,780	5,380	5,145	5,850
258 U. SD	1,632	2,350	2,239	2,669	3,373	2,084	3,534	5,830
259 Alcorn State U.	3,202 i	3,365	4,242 i	5,119	5,223	8,034	7,370	5,809
260 Finch U. of Health Sciences/Chicago Medical School	4,789	5,209	5,022	5,022e	4,860	5,117	6,256	5,638
Total, 1st 260 institutions	13,034,529	13,535,171	13,997,081	14,806,850	15,730,825	17,138,945	18,815,899	21,410,396
261 CUNY Queens C.	2,023	1,365	1,637	2,323	1,884	2,604	3,484	5,516
262 U. West FL	1,460 i	1,908 i	2,356 i	2,806	3,624	4,521	4,785	5,315
263 Tarleton State U.	672	911	1,177	1,483	1,623	1,426	4,094	5,216
264 Worcester Polytechnic Institute	8,552	6,967	7,315	5,230	4,292	4,219	4,506	5,013
265 Western IL U.	9,045	9,016	8,804	10,867	6,595	6,112	5,501	4,982
266 Northern IL U.	5,764	4,809	3,460	3,344	3,727	3,603	4,264	4,980
267 U. PR Rio Piedras Campus	3,315	3,866	4,275	5,460	5,654	5,620	6,013	4,971
268 CA State U. Long Beach	4,859 i	5,013	5,013e	8,471 i	11,929	12,964	2,910	4,944
269 Polytechnic U.	6,863	6,329	3,485	2,843	4,595	8,200	4,063	4,918
270 Oakland U.	3,860	3,222	3,303	3,218	3,033	3,033e	5,318	4,903
Total, 1st 270 institutions	13,080,942	13,578,577	14,037,906	14,852,895	15,777,781	17,191,247	18,860,837	21,461,154
271 Norfolk State U.	1,256	2,187	1,388	2,442	2,970	3,273	3,952	4,902
272 U. MA Boston	2,454	2,706	3,075	3,160	2,951	3,378	2,546	4,837
273 U. MO-St. Louis	2,840	3,349	3,650	3,975	4,841	4,523	4,321	4,755
274 ID State U.	1,471	2,054	1,128	5,200	1,258	3,723	3,837	4,738
275 Cleveland State U.	3,457	3,522 i	3,588e	3,696e	3,655e	3,318	3,986	4,649
276 SUNY C. of Environmental Science & Forestry	3,186 i	3,021	2,690	2,715	3,874	4,332	4,355	4,630
277 Villanova U.	1,362	1,390	1,471	2,470 i	3,470	4,035	4,293 i	4,551e
278 CA State U. Fullerton	1,028 i	1,028 i	1,028 i	1,028e	1,879 i	2,730 i	3,581 i	4,434
279 Clarkson U.	4,793	3,794	3,368	3,010	3,694	3,837	4,286	4,286e
280 U. AK Anchorage all campuses	0 i	0 i	0 i	0e	2,537	2,537e	3,390 i	4,244e
Total, 1st 280 institutions	13,102,789	13,601,628	14,059,292	14,880,591	15,808,910	17,226,933	18,899,384	21,507,180

See explanatory information and SOURCE at end of table.

TABLE B-33. Federally financed R&D expenditures at universities and colleges, ranked by fiscal year 2002 federally financed R&D expenditures: fiscal years 1995--2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
281 U. GU	2,011 i	2,076 i	2,141 i	2,206	2,242	3,165	3,355	4,183
282 Embry-Riddle Aeronautical U.	1,542 i	1,506 i	1,470 i	1,432	1,432e	1,551e	6,987	4,174
283 Boise State U.	1,597	1,875	1,932	1,892	2,595	2,151	3,962	4,173
284 Southwest TX State U.	1,737 i	1,530 i	1,323 i	1,116	1,871	3,519	3,854	4,144
285 Miami U. all campuses	2,314	2,633	2,876	2,687	3,302	2,674	3,324	4,021
286 Langston U.	2,661	2,521	1,828	2,031	2,340	2,553	2,863	3,975
287 TX Southern U.	3,474	3,474	3,707	2,504	2,292	1,844	1,908	3,910
288 East TN State U.	830	738	714	1,368	1,400	2,768	3,572	3,908
289 Wesleyan U.	2,651	3,889	3,731	3,570	3,640	4,058	3,893	3,734
290 Ponce School of Medicine	3,150	4,212	2,607	2,783 i	2,960	3,257	3,736	3,720
Total, 1st 290 institutions	13,124,756	13,626,082	14,081,621	14,902,180	15,832,984	17,254,473	18,936,838	21,547,122
291 U. Scranton	1,596 i	1,898 i	2,200 i	2,502 i	2,804 i	3,106 i	3,408 i	3,715
292 FL Institute of Technology	2,213	2,980	2,292	2,152	2,735	2,980	2,614	3,646
293 Marquette U.	2,394	2,270	2,421	3,510	3,416	3,085	3,309	3,565
294 U. LA Monroe, The	1,724	1,573	2,308	1,466	2,824	2,824e	3,106 i	3,540 i
295 Western KY U.	1,560 i	2,083 i	2,606 i	3,130	2,287	2,711	3,294	3,493
296 LA Tech U.	950 i	1,395 i	1,840 i	2,287	2,287e	2,635	2,242	3,487
297 American U.	2,807	2,864	2,672	3,163	2,735	1,886	1,999	3,467
298 Wellesley C.	1,568	2,533	2,304	2,304e	2,684 i	3,064 i	3,446	3,446e
299 Clark U.	1,910	1,756	2,134	1,660	2,651	1,652	2,605	3,418
300 Humboldt State U.	1,641 i	1,822 i	2,003 i	2,185	2,629	2,629e	2,945 i	3,354 i
Total, 1st 300 institutions	13,143,119	13,647,256	14,104,401	14,926,539	15,860,036	17,281,045	18,965,806	21,582,253
301 U. NC Greensboro	2,172	1,730	1,581	1,829	1,535	1,535e	2,803	3,340
302 West TX A&M U.	59 i	76 i	93 i	114	93	140	2,681	3,245
303 TX A&M U. Corpus Christi	--	--	--	--	--	1,363	2,357	3,127
304 Fisk U.	1,741 i	1,969	1,969e	2,909	2,846	2,652	2,577	3,030
305 U. AR Pine Bluff	3,661	2,747	2,838	2,911	2,911e	2,754 i	2,596	3,016
306 Ft. Valley State U.	2,936	2,338	2,471	2,359	2,318	2,417	2,417e	2,985
307 MT Tech of The U. MT	2,029 i	2,275 i	2,521 i	2,767 i	3,014	2,744	2,617	2,977
308 Spelman C.	1,277	988	1,282	1,700	1,832	1,978	3,262	2,968
309 U. DC	1,784 i	1,756	1,756e	1,898	1,829	1,629	2,008	2,963
310 Institute of Paper Science and Technology	2,341	3,043 i	3,746e	3,746e	3,398e	3,398e	2,947	2,947e
Total, 1st 310 institutions	13,161,119	13,664,178	14,122,658	14,946,772	15,879,812	17,301,655	18,992,071	21,612,851
311 Bowling Green State U. all campuses	2,347	2,391 i	2,436	2,029	1,847	1,847e	2,395	2,829
312 DE State U.	999	1,787	1,833	2,734	2,055	3,052	2,222	2,819
313 CUNY Herbert H. Lehman C.	1,011 i	891	927e	1,071 i	1,216	1,444	2,048	2,816
314 CA State Polytechnic U. Pomona	968 i	993 i	1,018 i	1,043 i	1,069	1,703	2,498	2,806
315 CA State U. Dominguez Hills	1,658 i	2,226 i	2,794 i	3,362 i	3,932	909	2,578	2,783
316 U. Redlands	--	--	--	--	--	--	--	2,674
317 Maharishi U. of Management	640	0	0	0	0	1,213	1,213	2,618
318 U. NE Omaha	675 i	759 i	843 i	931	2,153	2,403	2,712	2,613
319 Air Force Institute of Technology	2,229	2,291	4,212	2,228	1,540	5,371	1,671	2,609
320 CUNY Brooklyn C.	1,666	1,408	1,492	1,574e	2,228	2,866	2,776	2,538
Total, 1st 320 institutions	13,173,312	13,676,924	14,138,213	14,961,744	15,895,852	17,322,463	19,012,184	21,639,956

See explanatory information and SOURCE at end of table.

TABLE B-33. Federally financed R&D expenditures at universities and colleges, ranked by fiscal year 2002 federally financed R&D expenditures: fiscal years 1995--2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
321 Lincoln U. (Jefferson City, MO)	2,702	2,681	2,584	2,635 i	2,686	2,502	2,236	2,513
322 TX Christian U.	1,972	2,159	2,541	2,493	3,257	2,441	2,824	2,492
323 Sam Houston State U.	3,094 i	4,495	4,974	2,527	3,225	2,128	1,802	2,386
324 C. Charleston	999 i	1,240 i	1,481 i	1,724	1,553	1,607	1,988	2,364
325 U.S. Naval Academy	4,398 i	3,777 i	3,156 i	2,534	2,234	2,770	3,140	2,324
326 Duquesne U.	832	618	711	867	1,531	1,902	1,969	2,232
327 Savannah State U.	214	317	316	331 i	513	905	2,181	2,206
328 Bowie State U.	93	49	2,672	4,403	2,360	2,360e	2,022	2,200
329 U. AR Little Rock	--	--	--	--	--	3,400e	2,088	2,088e
330 Lamar U.	1,549	1,451	1,169	2,307	2,914	2,330	2,217	2,080
Total, 1st 330 institutions	13,189,165	13,693,711	14,157,817	14,981,565	15,916,125	17,344,808	19,034,651	21,662,841
331 St. Joseph's U.	265 i	330 i	395 i	462	185	797	1,130	2,069
332 Ithaca C.	504 i	693 i	882 i	1,075	1,607	2,131	1,653	2,060
333 Winston-Salem State U.	797	1,246	1,874	1,898	1,619	3,216	4,853	2,022
334 SC State U.	2,325 i	1,910	1,948	1,968	1,978	1,988	1,988e	1,998
335 Fordham U.	1,327	1,421	1,472	769	1,725	2,101	1,980	1,990
336 Grambling State U.	145	1,450	2,630	1,936	1,936e	2,200	2,200e	1,977
337 Depaul U.	856	842	926	822	571	478	1,142	1,971
338 Nova Southeastern U.	711	861	1,003	1,500	2,637	2,060	1,750	1,959
339 TX A&M U. Kingsville	1,361 i	1,532 i	1,703 i	1,874	1,771	2,179	1,828	1,956
340 NM Highlands U.	1,902 i	2,345	2,446 i	2,547 i	2,648	3,747	1,849	1,953
Total, 1st 340 institutions	13,199,358	13,706,341	14,173,096	14,996,416	15,932,802	17,365,705	19,055,024	21,682,796
341 CA State U. Hayward	428 i	642 i	856 i	1,070 i	1,284 i	1,498 i	1,712 i	1,930
342 Gallaudet U.	2,614 i	2,449 i	2,284 i	2,119	2,264	1,682	1,768	1,880
343 Northeastern OH Universities C. of Medicine	1,459	1,068	1,530	1,430	1,693	2,002	2,072	1,871
344 Morehouse C.	793	591	591e	591e	1,843	1,843e	1,843 i	1,843 i
345 New England C. of Optometry	0	437	715	1,020	1,118	950	1,179	1,792
346 TN Technological U.	1,182	1,250	1,205	1,065	1,222	1,452	1,124	1,695
347 Morgan State U.	3,557 i	3,691 i	3,825 i	3,960	1,066	4,371	2,390	1,674
348 Western WA U.	1,456 i	1,619 i	1,782 i	1,954	2,004	1,548	1,300	1,651
349 CUNY York C.	882	903	1,271	1,480	1,372	1,317	923	1,650
350 Albany State U.	675 i	675e	675e	1,019	1,019e	840	740	1,640
Total, 1st 350 institutions	13,212,404	13,719,666	14,187,830	15,012,124	15,947,687	17,383,208	19,070,075	21,700,422
351 Ball State U.	820	1,459	1,329	959	835	873	1,177	1,590
352 IL State U.	2,632	2,110	2,420	2,468e	2,057	2,108	1,638	1,574
353 U. New Haven	203 i	272	188 i	104 i	19	19e	1,492	1,492e
354 Central WA U.	692 i	813 i	934 i	1,055 i	1,179	1,426	1,337	1,468
355 Mt. Holyoke C.	630 i	663 i	696 i	733	975	1,135	1,004	1,449
356 U. San Diego	574	167	157	334	282	422	185	1,425
357 Southern IL U. Edwardsville	289 i	275 i	261 i	244	147	200	311	1,413
358 CA State U. San Bernardino	168 i	198 i	228 i	258	697	880	676	1,399
359 U. North FL	--	--	--	--	--	--	731	1,397
360 CA State U. Fresno	1,016 i	1,199 i	1,382 i	1,565 i	1,749e	1,823	585	1,392
Total, 1st 360 institutions	13,219,428	13,726,822	14,195,425	15,019,844	15,955,627	17,392,094	19,079,211	21,715,021

See explanatory information and SOURCE at end of table.

TABLE B-33. Federally financed R&D expenditures at universities and colleges, ranked by fiscal year 2002 federally financed R&D expenditures: fiscal years 1995--2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
361 Williams C.	1,010 i	1,010 i	1,010 i	1,010e	1,345	1,345e	1,367 i	1,389
362 U. TX-Pan American	1,066 i	1,121 i	1,176 i	1,233	1,068	1,135	1,288	1,387
363 James Madison U.	565 i	617 i	669 i	722	763	712	890	1,372
364 U. Richmond	288	464	588	781	812	849	815	1,347
365 TX Woman's U.	882	1,006	1,304	1,485	1,306	1,440	1,185	1,321
366 Harvey Mudd C.	578 i	691 i	804 i	917 i	1,032	1,032e	1,156 i	1,316 i
367 CUNY C. Staten Island	503	557	559	739	595	858	1,128	1,315
368 Occidental C.	1,513 i	1,513 i	1,513 i	1,513e	297	545	812	1,303
369 CA State U. Monterey Bay	--	--	--	--	--	--	1,285	1,285e
370 St. Cloud State U.	511 i	669 i	827 i	987	987e	987e	1,106 i	1,260 i
Total, 1st 370 institutions	13,226,344	13,734,470	14,203,875	15,029,231	15,963,832	17,400,997	19,090,243	21,728,316
371 AL State U.	970	970	787	1,133	1,190	1,190e	1,249e	1,249
372 Bucknell U.	419 i	483 i	547 i	611 i	679	754	1,106	1,240
373 Chicago State U.	717	739	738	696	1,254	1,248	1,356	1,236
374 Union C. (Schenectady, NY)	538	610	343	126	608	553	587	1,217
375 U. WI La Crosse	601	748	510	562	686	1,001	871	1,196
376 SUNY C. Old Westbury	517	510	743	767	485	1,067	1,067e	1,193
377 Long Island U. all campuses	77	14	700	1,197	1,116	1,044	919	1,162
378 Middlebury C.	601 i	622 i	643 i	664 i	688	1,371	1,285	1,150
379 U. Central AR	--	--	--	--	--	820	1,189	1,140
380 U.S. Coast Guard Academy	306 i	304 i	302 i	300	300	405	466	1,128
Total, 1st 380 institutions	13,231,090	13,739,470	14,209,188	15,035,287	15,970,838	17,410,450	19,100,338	21,740,227
381 Swarthmore C.	538	661	511	586	586e	586e	691	1,107
382 Hampshire C.	775 i	964 i	1,155	1,264	662	872	998	1,095
383 New School U.	682 i	748 i	814	773	1,069	873	1,083	1,083e
384 U. Northern IA	1,099	712	588	496	344	378	380	1,063
385 St. John's U. (Jamaica, NY)	941	1,227	1,230	916	1,177	938	938e	1,060 i
386 Elizabeth City State U.	497 i	753	1,146	575	1,040	1,558	1,248	1,058
387 Macalester C.	271 i	344 i	417 i	490 i	563 i	636 i	713	1,057
388 Stephen F. Austin State U	985	1,684	2,285	1,125	776	521	959	1,054
389 Towson U.	178	148	170	268	1,028	846	694	1,037
390 Hamilton C.	359 i	359 i	359 i	359e	414 i	469	382	1,035
Total, 1st 390 institutions	13,237,415	13,747,070	14,217,863	15,042,139	15,978,497	17,418,127	19,108,424	21,750,876
391 SUNY C. of Optometry	130	327	268	386	755	698	993	1,032
392 MS Valley State U.	471	586	563	350	495	834	1,316	1,030
393 Barnard C.	813	678	685e	1,038	1,008	1,198	1,269	1,021
394 Furman U.	480	475	533	315	208	524	487	1,003
395 U. WI Stout	741	881	774	986	782	880	816	1,003
396 Eastern WA U.	804 i	804 i	804 i	804e	1,244	1,366	1,668	986
397 Bates C.	285	387	306	411	576	463	819	977
398 NC Central U.	813	804 i	795 i	786 i	777e	761 i	853 i	971 i
399 CUNY Medgar Evers C.	--	--	--	--	--	258	714	970
400 Benedict C.	740 i	552 i	552 i	733 i	933 i	1,143	1,014	966
Total, 1st 400 institutions	13,242,692	13,752,564	14,223,143	15,047,948	15,985,275	17,426,252	19,118,373	21,760,835

See explanatory information and SOURCE at end of table.

TABLE B-33. Federally financed R&D expenditures at universities and colleges, ranked by fiscal year 2002 federally financed R&D expenditures: fiscal years 1995--2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
401 Pittsburg State U.	0	30	69	229	94	247	514	963
402 Carleton C.	356 i	366 i	376 i	386 i	398	760	693	959
403 Amherst C.	969 i	934 i	899 i	861	726	999	849	955
404 Bradley U.	295 i	407 i	519 i	632	218	146	286	953
405 Alfred U. all campuses	1,004	600	445	1,348	1,491	1,227	1,166	946
406 PA C. of Optometry	415 i	383 i	351 i	319 i	283	525	695	928
407 Northeastern State U.	--	--	--	--	--	--	--	919
408 West Chester U. PA	1,017	271	148	462	547	697	697e	918
409 Pomona C.	425 i	410 i	395 i	376	654	678	679	917
410 Southern U. New Orleans	--	--	--	--	--	60e	652	902
Total, 1st 410 institutions	13,247,173	13,755,965	14,226,345	15,052,561	15,989,686	17,431,591	19,124,604	21,770,195
411 SUNY C. Oswego	595 i	551	459	480	478	587	578	901
412 Kirksville C. of Osteopathic Medicine	715	482	381	329	311	542	731	895
413 GA Southern U.	796 i	805 i	814 i	823 i	833	944	841	882
414 Haverford C.	496	635	933	820	937	1,000	989	874
415 Hope C.	638 i	697 i	756 i	815 i	879	602	692	853
416 U. Northern CO	196	470	702	609e	526	982	994	840
417 CUNY Graduate Ctr.	2,709 i	3,077 i	3,445	3,573	515	532	1,489	832
418 Baylor U.	502	433	615	522	522e	353	516	830
419 Youngstown State U.	256 i	339 i	422 i	508	144	191	425	800
420 Bethune Cookman C.	0	333	472	566	583	586	926	794
Total, 1st 420 institutions	13,254,076	13,763,787	14,235,344	15,061,606	15,995,414	17,437,910	19,132,785	21,778,696
421 Coastal Carolina U.	--	--	--	--	--	1,051	736	787
422 Eastern MI U.	570 i	651 i	732 i	813 i	895	1,213	1,745	777
423 Loyola C.	1,359	981	833	1,191	1,397	1,513	675	770
424 SUNY C. Plattsburgh	625	740	692	802	432	610	712	760
425 Bryn Mawr C.	1,411	1,039	871	910	764	978	855	751
426 Rose-Hulman Institute of Technology	336 i	438 i	540 i	642 i	748	420	1,457	744
427 Murray State U.	284	362	422	554	388	629	778	739
428 U. of the Pacific	970	860	1,755	254	844	546	489	730
429 OR Institute of Technology	--	--	--	--	--	--	--	727
430 Lincoln U. (Lincoln University, PA)	818 i	1,135	949	1,364	972	709	620	718
Total, 1st 430 institutions	13,260,449	13,769,993	14,242,138	15,068,136	16,001,854	17,445,579	19,140,852	21,786,199
431 Santa Clara U.	439 i	450 i	479 i	506 i	533 i	574 i	625 i	706 i
432 Drake U.	183 i	179 i	175 i	171 i	167	198	163	692
433 Seton Hall U.	1,214e	1,228 i	1,243e	1,243	1,116	996	826	692
434 Dickinson C.	--	--	--	1,168	653	390	806	685
435 St. Olaf C.	259 i	299 i	339 i	379 i	424	530	403	683
436 U. AK Southeast	152 i	226 i	300 i	374 i	448 i	522 i	596 i	673e
437 Bowdoin C.	290	388	137	213	154	228	140	658
438 Augsburg C.	554 i	492 i	430 i	368 i	303	337	497	655
439 Milwaukee School of Engineering	90 i	130 i	170 i	211	269	306	420	651
440 U. WI Stevens Point	860	629	413	306	257	193	270	639
Total, 1st 440 institutions	13,264,490	13,774,014	14,245,824	15,073,075	16,006,178	17,449,853	19,145,598	21,792,933

See explanatory information and SOURCE at end of table.

TABLE B-33. Federally financed R&D expenditures at universities and colleges, ranked by fiscal year 2002 federally financed R&D expenditures: fiscal years 1995--2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
441 Kettering U.	148 i	162 i	176 i	192	89	270	270	638
442 Claremont Graduate U.	201	256	259	123	384	798	1,024	621
443 CA State U. Chico	295	107	1,090	1,497	850	450	961	617
444 U. WI Green Bay	218	215	238	238	240	267	328	601
445 U. Houston-Downtown	880 i	870 i	860 i	850 i	838	660	660e	596
446 Midwestern U.	458	613	756	491	443	467	542	589
447 Colgate U.	--	--	--	--	--	917	708	586
448 Bennett C.	111	93 i	93e	583	583e	583 i	583 i	583 i
449 Reed C.	357 i	343 i	329 i	315 i	300e	391	277	583
450 SUNY C. Buffalo	1,029	1,786	1,207	1,054	1,167	577	338	583
Total, 1st 450 institutions	13,268,187	13,778,459	14,250,832	15,078,418	16,011,072	17,455,233	19,151,289	21,798,930
451 U. WI Eau Claire	224	242	325	395	338	219	288	580
452 Albany C. of Pharmacy	--	--	--	--	--	839	806	572
453 U. WI Parkside	174	112	132	119	108	212	352	563
454 Allegheny C.	256 i	255 i	254 i	253 i	252	88	412	562
455 U. WI Superior	1,274	619	169	96	97	33	79	552
456 Appalachian State U.	440	303	244	247	219	128	280	543
457 Southern OR U.	161 i	200 i	241	230	205	253	154	542
458 U. Southern CO	1,264	959	616	538	642	370	707	541
459 U. Hartford	300	41	27	124	299	629	578	537
460 VA Union U.	--	--	--	537	537e	537 i	537 i	537 i
Total, 1st 460 institutions	13,272,280	13,781,190	14,252,840	15,080,957	16,013,769	17,458,541	19,155,482	21,804,459
461 Southeastern LA U.	233 i	311 i	389 i	467 i	550	629	342	525
462 CA State U. Bakersfield	225 i	192 i	159 i	126 i	92e	459	459e	523 i
463 Lafayette C.	287 i	289 i	291 i	295	354	331	353	519
464 Smith C.	661 i	695 i	730	634	240	774	812	515
465 U. of Health Sciences	163	180	162	305	305e	0	380	513
466 John Carroll U.	578 i	701 i	824 i	947 i	1,072	1,072e	232	489
467 SUNY C. Geneseo	101	251	218	229	183	389	350	481
468 Indiana U. PA all campuses	283	520	491	491e	354	544	453	476
469 C. NJ, The	--	--	--	--	--	--	--	456
470 Oakwood C.	300	371	716	690	447	447e	447 i	447 i
Total, 1st 470 institutions	13,275,111	13,784,700	14,256,820	15,085,141	16,017,366	17,463,186	19,159,310	21,809,403
471 Chapman U.	20 i	30 i	40 i	50 i	60 i	73	77	442
472 Evergreen State C.	358 i	393 i	428 i	463 i	498 i	537	487	441
473 Franklin and Marshall C.	610 i	647 i	684 i	723	348	604	599	441
474 U. NC Asheville	262 i	250 i	238 i	226 i	213	227	386	412
475 McNeese State U.	131	131e	25	256	611	512	290	409
476 Tougaloo C.	806 i	867 i	929	657	767	473	407	407 i
477 Oberlin C.	399 i	456 i	513 i	570 i	627 i	691	285	406
478 Grand Valley State U.	0	30	42	92	309	368	392	405
479 Hofstra U.	2,218	192	319	319	659	649	402	402e
480 National U. of Health Sciences	--	--	--	--	--	--	--	402
Total, 1st 480 institutions	13,279,915	13,787,696	14,260,038	15,088,497	16,021,458	17,467,320	19,162,635	21,813,570

See explanatory information and SOURCE at end of table.

TABLE B-33. Federally financed R&D expenditures at universities and colleges, ranked by fiscal year 2002 federally financed R&D expenditures: fiscal years 1995--2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
481 State U. West GA	285 i	408 i	531 i	654 i	777 i	900	634	400
482 Dillard U.	145	314	164	164e	164	182	199	393
483 SUNY C. Brockport	231e	288	264	349	308	344	344e	392 i
484 Philadelphia C. of Osteopathic Medicine	238	91	95	57	99	392	395	387
485 Grinnell C.	117 i	117 i	117 i	117e	210	774	168	385
486 Montclair State U.	87 i	98 i	109 i	120 i	131 i	146	465	383
487 U. Detroit Mercy	1,213	950	877	494	310	314	219	369
488 Pace U. all campuses	0	0	0	555	435	236	295	362
489 Spalding U.	15	0	0	176	0	441	331	359
490 Radford U.	--	--	--	103	115	444	492	357
Total, 1st 490 institutions	13,282,246	13,789,962	14,262,195	15,091,286	16,024,007	17,471,493	19,166,177	21,817,357
491 U. WI Oshkosh	172	119	199	268	307	248	271	356
492 CUNY Baruch C.	142	41	15	83 i	151	87	87e	347
493 Morris Brown C.	3,796	2,422	525	525e	321 i	116	116e	343
494 Calvin C.	276 i	283 i	290 i	297 i	306	270	514	338
495 C. of the Holy Cross	379	1,245	265	251	151	142	446	329
496 SUNY C. Cortland	168	246	235	26	30	233	276	316
497 AR State U. main campus	79 i	102 i	125 i	152	224	267	321	312
498 Fayetteville State U.	470 i	503 i	139	378	265	507	298	311
499 U. of the Sciences in Philadelphia	300	342	269	162	162e	222	200	311
500 Colby C.	86 i	88 i	90 i	93	121	83	146	306
Total, 1st 500 institutions	13,288,114	13,795,353	14,264,347	15,093,521	16,026,045	17,473,668	19,168,852	21,820,626
501 U. Portland	92	119	127	55	105	235	291	285
502 C. Wooster	191	172 i	153	244	318	276	249	284
503 IN State U. all campuses	369	532	669	592	368	251	269	284
504 Central State U.	1,171 i	1,162 i	1,153 i	1,144	1,144e	283e	283 i	283 i
505 Western Carolina U.	116	95	218	277	300	354	362	280
506 Lewis and Clark C.	197 i	234 i	271 i	309	394	392	206	272
507 Augustana C. (Sioux Falls, SD)	279 i	278 i	277 i	276 i	275 i	274 i	273 i	265
508 St. Mary's C. MD	--	--	--	--	--	378	233	262
509 Valparaiso U.	262 i	231 i	200	259	500	275	308	262
510 Manhattan C.	614 i	519 i	424 i	327	70	293	293e	257
Total, 1st 510 institutions	13,291,405	13,798,695	14,267,839	15,097,004	16,029,519	17,476,679	19,171,619	21,823,360
511 Trinity U.	804 i	777 i	750 i	723 i	692	746	746e	250
512 U. Central OK	66 i	66 i	66 i	65	121	9	245	250
513 Eastern OR U.	--	--	--	--	--	--	--	243
514 Wilberforce U.	384	323	236	236e	236 i	236 i	236 i	236 i
515 Pitzer C.	190 i	182	164	197	246	299	261	227
516 Skidmore C.	28 i	42 i	56 i	74	61	67	68	227
517 Eastern KY U.	2,719 i	3,889 i	5,059 i	6,229 i	7,403	192	235	225
518 Ft. Lewis C.	332	204	323	149	157	139	231	221
519 Kennesaw State U.	71	111	141	132	142	249	298	221
520 Rider U.	--	--	--	--	--	225	189	218
Total, 1st 520 institutions	13,295,999	13,804,289	14,274,634	15,104,809	16,038,577	17,478,841	19,174,128	21,825,678

See explanatory information and SOURCE at end of table.

TABLE B-33. Federally financed R&D expenditures at universities and colleges, ranked by fiscal year 2002 federally financed R&D expenditures: fiscal years 1995--2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
521 Alliant International U.	--	--	--	--	--	--	378	214
522 Western U. of Health Sciences	67	115	40	253	253e	127 i	0	214
523 Middle TN State U.	55	119	107	127	319	478	296	211
524 Whitman C.	132 i	108 i	84 i	58	181	283	322	211
525 U. WI Whitewater	197	233	171	145	106	223	255	210
526 Claflin C.	290	474	1,074	1,028	250	250e	1,958	203
527 OH Wesleyan U.	250	444	340	106	185	185e	194 i	203
528 CUNY John Jay C. of Criminal Justice	141	579	565	912	951	779	733	201
529 U. IL Springfield	--	--	--	--	--	182	126	200
530 Bridgewater State C.	359 i	299 i	239 i	179 i	114	287	64	196
Total, 1st 530 institutions	13,297,490	13,806,660	14,277,254	15,107,617	16,040,936	17,481,635	19,178,454	21,827,741
531 Lawrence Technological U.	47 i	48 i	49 i	51	57	121	194	191
532 Central MI U.	310 i	213	107 i	0	142	142e	291	190
533 NJ City U.	--	--	--	--	--	--	--	184
534 Denison U.	166 i	179 i	192 i	205 i	221	238	121	183
535 MN State U. Mankato	261 i	298 i	335 i	372	164	175	165	181
536 Trinity C. (Hartford, CT)	370 i	409 i	448 i	487 i	529	326	326e	181
537 Saginaw Valley State U.	819 i	727 i	635 i	543 i	451 i	359 i	267 i	174
538 Abilene Christian U.	196 i	186 i	176 i	162	114	165	162	173
539 Providence C.	22	39	20	17	29	29e	101 i	173
540 Iona C.	121	127	145	149 i	153 i	157 i	161 i	167
Total, 1st 540 institutions	13,299,802	13,808,886	14,279,361	15,109,603	16,042,796	17,483,347	19,180,242	21,829,538
541 Des Moines U. Osteopathic Medical Ctr.	0	0	0	2	309	134	164	164e
542 Sonoma State U.	--	--	--	145	16	33	597	161
543 U. of St. Thomas (St. Paul, MN)	134 i	141 i	148 i	158	19	54 i	89	160
544 Pacific U.	0	0	0	0	0	20	157	157
545 U. Southern ME	330 i	299 i	268 i	236	123	123e	138 i	157 i
546 St. Mary's U. (San Antonio, TX)	160 i	108 i	56 i	0	0	62	193	152
547 SUNY Purchase C.	138 i	161	211	160	188	139	145 i	151
548 Southern CT State U.	212 i	184 i	156 i	128 i	100	215	215e	144
549 CO C.	91 i	96 i	101 i	106	47	145	136	143
550 AR Tech U.	47 i	49 i	51 i	55	137	92	130	130e
Total, 1st 550 institutions	13,300,914	13,809,924	14,280,352	15,110,593	16,043,735	17,484,364	19,182,206	21,831,057
551 Lake Forest C.	10 i	15 i	20 i	28	74	200	220	126
552 Andrews U.	103	252	106	117	117e	87	145	123
553 Simmons C.	272 i	233 i	194 i	155 i	112	74	30	118
554 Adelphi U.	220	221	329	80	130	73	101	114 i
555 U. NE Kearney	14 i	21 i	28 i	35 i	42 i	49	146	108
556 Fairfield U.	133 i	147 i	161 i	175 i	189 i	203	160	106
557 Salem International U.	--	--	--	271	247	239	106	106e
558 Regis U.	79 i	72 i	65 i	58	93	69	69e	105
559 SUNY C. Fredonia	148	144	100	93	52	120	121	104
560 Central CT State U.	86 i	95 i	104 i	113 i	122 i	137	138	102
Total, 1st 560 institutions	13,301,979	13,811,124	14,281,459	15,111,718	16,044,913	17,485,615	19,183,442	21,832,169

See explanatory information and SOURCE at end of table.

TABLE B-33. Federally financed R&D expenditures at universities and colleges, ranked by fiscal year 2002 federally financed R&D expenditures: fiscal years 1995--2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
561 Juniata C.	59 i	77 i	95 i	113 i	135	105	107e	101
562 Shaw U.	56	115	122	110	100	100e	100 i	100 i
563 U. Findlay, The	--	--	--	--	--	275	0	100
564 Fairleigh Dickinson U. all campuses	53e	35 i	17	7	7	24	98	98
565 U. WI River Falls	19	55	71	69	69	24	81	89
566 Willamette U.	--	--	--	137	29	77	69	87
567 NY Institute of Technology all campuses	41	30	28	38	92	114	166	84
568 Southwest MO State U.	425 i	482 i	539 i	596	484	484e	443	79
569 Wilkes U.	--	--	--	--	--	--	--	79
570 MA C. of Pharmacy & Health Sciences	0	0	0	0	0e	64 i	129	77
Total, 1st 570 institutions	13,302,632	13,811,918	14,282,331	15,112,788	16,045,829	17,486,882	19,184,635	21,833,063
571 Sul Ross State U.	21	137	148	156	74	228	95	77
572 Monmouth U.	739	614	635	248	178	178e	89	73
573 Truman State U.	91 i	125	223	156	156e	127 i	98 i	68
574 Ferris State U.	--	--	--	49	0	0e	62	62e
575 Knox C.	370 i	347 i	324 i	301 i	278 i	254	153	60
576 Nicholls State U.	--	--	--	--	--	14	0	59
577 New C. FL	--	--	--	--	--	--	--	55
578 Pontifical Catholic U. PR, The	20	20e	64	78	96	85	89	54
579 Point Loma Nazarene C.	53 i	58 i	63 i	68 i	73 i	83	95	53
580 Northeastern IL U.	16	62	110	68	18	24	47	47
Total, 1st 580 institutions	13,303,942	13,813,281	14,283,898	15,113,912	16,046,702	17,487,875	19,185,363	21,833,671
581 AK Pacific U.	--	--	--	--	--	--	--	43
582 Widener U. all campuses	0	0	0	0	70	37	37e	42 i
583 TX A&M U. Commerce	42	80	55	122	109	157	83	37
584 Southeast MO State U.	129 i	146 i	163 i	180 i	200e	173	108	30
585 U. Dallas	0	34	36	441	157	0	26	30
586 Northern KY U.	188 i	160 i	132 i	104 i	71	41	34 i	26
587 Wentworth Institute of Technology	1,155	1,023	591	933	669	452	62	24
588 Western State C. CO	47 i	45 i	43 i	37	20	28	5	17
589 San Francisco State U.	3,854 i	3,799 i	3,744 i	3,689 i	3,630e	4,561e	4,561e	13
590 Jarvis Christian C.	219	102	83	55	56	55	55e	10
Total, 1st 590 institutions	13,309,576	13,818,670	14,288,745	15,119,473	16,051,684	17,493,379	19,190,334	21,833,943
591 VA Military Institute	217	240	175	67	92	50	24	10
592 Antioch U. all campuses	81	0	0	0	0	0	0	0
593 Azusa Pacific U.	--	--	--	--	--	0e	0	0
594 Biola U.	0	0	0	0	0	0	0	0
595 Bluefield State C.	--	--	--	0	0	0	0	0
596 CA Institute of Integral Studies	0	0	0	0	0	0	0	0
597 CT C.	96 i	65 i	34 i	0e	0 i	0 i	0 i	0 i
598 Cooper Union	50 i	50 i	50 i	50e	34	94	27	0
599 Coppin State C.	208	116	15	6	11	0	0	0
600 East Stroudsburg U. PA	226 i	289 i	352 i	415 i	480	271	147	0
Total, 1st 600 institutions	13,310,454	13,819,430	14,289,371	15,120,011	16,052,301	17,493,794	19,190,532	21,833,953

See explanatory information and SOURCE at end of table.

TABLE B-33. Federally financed R&D expenditures at universities and colleges, ranked by fiscal year 2002 federally financed R&D expenditures: fiscal years 1995--2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
601 Forest Institute of Professional Psychology	0	0	0	0	0	0	0	0
602 Golden Gate U.	0	0	0	0	0	0	0	0
603 Institute of Textile Technology	0	0	0	0	0	0	0	0
604 Johnson C. Smith U.	1,083	1,083	1,546	4,299	8,659	250	195	0
605 La Salle U.	151 i	302	192	136	229	0	236	0
606 Le Moyne-Owen C.	--	--	--	1,404	1,031	1,700	1,250	0
607 Pepperdine U.	0	0	0	0	0	0	0	0
608 Philander Smith C.	145	73	73	73e	72	72e	0	0
609 Rust C.	332	0	0	317	114	138	0	0
610 Selma U.	495 i	250	210	210e	116	0	0e	0
Total, 1st 610 institutions	13,312,660	13,821,138	14,291,392	15,126,450	16,062,522	17,495,954	19,192,213	21,833,953
611 Talladega C.	0	0	0	0 i	0	0	0	0
612 Union Institute, The	0	0	0 i	0	0	0	0e	0
613 U. MD Eastern Shore	1,880	1,980	2,187	2,265	2,508	3,895	5,626	0
614 U. MO system administration	0	0	0	0	0	0	0	0
615 WV School of Osteopathic Medicine	0	0	0	0	0	0	0	0
616 WV State C.	40	10	196	0	0	0e	0e	0 i
617 Wiley C.	--	--	--	0	0	0	0	0
Total, 1st 617 institutions	13,314,580	13,823,128	14,293,775	15,128,715	16,065,030	17,499,849	19,197,839	21,833,953
Total, all other sampled institutions	16,730	16,523	19,833	21,016	20,993	17,750	14,880	0

1 Johns Hopkins University includes the Applied Physics Laboratory, with $540 million in federally financed R&D expenditures.
2 These data do not include R&D expenditures at university-associated federally funded research and development centers. See tables B-71 and B-72.

-- = not available.
e = estimated.
i = imputed.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-34. Non-Federal R&D expenditures at universities and colleges, ranked by fiscal year 2002 non-Federal R&D expenditures: fiscal years 1995--2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
Total, all institutions	8,838,487	9,205,188	10,055,115	10,703,981	11,442,302	12,545,142	13,554,368	14,498,688
1 U. CA Los Angeles	101,895	118,010	182,928	213,362	225,621	256,664	380,943	420,836
2 U. WI Madison	174,160	179,396	186,050	203,182	250,476	275,732	300,134	317,098
3 U. CA Davis	121,471	124,416	162,398	174,778	183,487	223,049	277,459	280,009
4 TX A&M U. all campuses	225,805	218,308	221,732	248,782	253,052	247,629	257,659	273,193
5 U. CA San Francisco	105,471	98,893	136,635	160,340	183,914	194,135	247,486	269,572
6 U. CA Berkeley	133,374	148,149	218,101	248,679	260,514	310,176	238,193	257,449
7 OH State U. all campuses	123,627	143,336	166,518	177,341	187,594	229,180	229,560	254,504
8 U. MI all campuses	167,114	187,814	187,457	185,311	174,393	187,523	204,406	229,469
9 U. CA San Diego	72,888	79,592	138,086	155,687	169,625	192,522	213,257	225,625
10 Cornell U. all campuses	136,395	136,452	145,509	159,324	160,760	180,521	203,362	225,545
Total, 1st 10 institutions	1,362,200	1,434,366	1,745,414	1,926,786	2,049,436	2,297,131	2,552,459	2,753,300
11 U. FL	119,855	168,126	178,045	168,352	182,151	193,318	212,471	219,208
12 NC State U.	111,516	116,263	159,819	174,721	204,311	200,618	203,384	214,814
13 U. IL Urbana-Champaign	107,096	123,481	130,104	158,016	172,480	179,534	195,547	212,851
14 PA State U. all campuses	143,400	147,250	154,749	176,369	180,297	201,501	212,115	208,033
15 U. GA	148,747	153,103	171,093	163,233	181,413	195,798	205,385	206,574
16 U. MN all campuses	141,705	142,252	162,946	155,582	163,623	181,422	197,722	198,964
17 LA State U. all campuses	125,267	131,804	140,184	141,838	149,977	162,226	174,286	189,435
18 Duke U.	70,177	92,604	95,642	109,856	161,517	152,445	157,024	180,177
19 U. AZ	123,560	125,652	133,057	140,329	142,119	157,929	167,644	179,055
20 Purdue U. all campuses	110,163	115,319	114,619	123,635	130,703	142,526	156,766	178,301
Total, 1st 20 institutions	2,563,686	2,750,220	3,185,672	3,438,717	3,718,027	4,064,448	4,434,803	4,740,712
21 GA Institute of Technology all campuses	106,983	109,478	127,693	145,590	150,864	178,347	162,697	174,667
22 Rutgers The State U. NJ, all campuses	119,696	117,515	114,813	127,224	138,174	145,557	159,637	167,624
23 MI State U.	104,510	105,346	107,201	112,465	118,077	141,324	153,587	167,192
24 IN U. all campuses	59,471	63,379	69,267	75,914	92,528	120,160	143,118	166,321
25 Baylor C. of Medicine	96,178	92,319	94,915	105,918	131,087	140,926	147,067	152,449
26 U. MD Baltimore	48,278	56,996	62,708	65,284	56,387	133,134	139,916	149,805
27 VA Polytechnic Institute & State U.	69,427	63,496	82,151	84,384	93,864	121,545	138,939	149,584
28 U. TX M. D. Anderson Cancer Ctr.	77,470	78,170	79,876	78,186	85,713	100,324	118,693	144,512
29 U. WA	97,876	93,777	89,175	95,900	114,547	139,720	154,523	140,214
30 U. KY all campuses	61,920	67,271	62,676	100,586	107,850	128,534	125,482	135,849
Total, 1st 30 institutions	3,405,495	3,597,967	4,076,147	4,430,168	4,807,118	5,414,019	5,878,462	6,288,929
31 U. MD College Park	115,874	117,269	112,999	93,992	112,547	115,824	121,868	130,885
32 MA Institute of Technology	97,257	109,068	99,534	102,357	111,385	119,631	131,176	125,082
33 U. PA	71,498	72,263	79,016	85,563	104,556	117,955	117,856	124,682
34 U. NE Lincoln	70,824	70,108	75,831	76,969e	94,069	98,192	113,643	120,026
35 Johns Hopkins U., The	82,638	88,349	104,715	100,637	103,938	107,890	119,505	117,725
36 IA State U.	96,166	97,010	102,495	105,570	107,122	115,582	117,172	117,245
37 U. IL Chicago	61,853	62,549	68,557	77,942	88,687	93,896	107,989	116,669
38 U. NC Chapel Hill	52,492	51,495	67,395	63,791	69,832	74,278	81,961	116,235
39 U. South FL	63,200	64,406	68,581	68,395	81,956	94,840	112,724	113,786
40 Washington U. St. Louis	62,179	63,443	75,433	82,377	97,008	108,068	121,714	113,519
Total, 1st 40 institutions	4,179,476	4,393,927	4,930,703	5,287,761	5,778,218	6,460,175	7,024,070	7,484,783

See explanatory information and SOURCE at end of table.

TABLE B-34. Non-Federal R&D expenditures at universities and colleges, ranked by fiscal year 2002 non-Federal R&D expenditures: fiscal years 1995--2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
41 Stanford U.	45,714	56,153	63,038	67,883	72,602	90,739	98,438	111,854
42 SUNY Buffalo all campuses	68,055	49,888	57,571	75,613	81,333	91,282	90,234	110,893
43 U. TX Southwestern Medical Ctr. Dallas	46,409	48,694	51,232	56,511	63,524	80,051	90,556	108,700
44 U. IA	61,778	72,582	75,880	83,751	84,497	96,180	100,099	108,065
45 U. Southern CA	58,553	64,977	67,437	78,259	81,122	89,573	94,390	105,752
46 Northwestern U.	83,344	86,452	92,651	95,324	101,162	95,536	99,804	103,547
47 Wayne State U.	59,894	65,887	70,676	80,810	89,222	92,494	96,536	103,097
48 U. TX Austin	84,737	93,798	87,067	79,761	93,209	93,922	99,920	101,808
49 U. OK all campuses	65,225	66,392	68,631	72,410	84,496	90,360	88,431	99,985
50 U. TN system	75,022	75,607	80,181	80,901	88,743	91,631	83,287	99,917
Total, 1st 50 institutions	4,828,207	5,074,357	5,645,067	6,058,984	6,618,128	7,371,943	7,965,765	8,538,401
51 U. MO-Columbia	90,450	80,141	84,843	90,613	95,127	93,441	106,347	99,269
52 Rockefeller U.	60,355	68,226	66,020	71,649	76,509	78,927	90,209	99,044
53 U. CA Irvine	40,253	46,653	55,376	63,813	66,337	70,163	78,131	93,921
54 U. Pittsburgh all campuses	41,970	39,866	41,700	45,331	54,859	66,654	80,221	93,287
55 U. KS all campuses	58,493	58,791	62,160	66,548	75,480	79,720	81,973	89,468
56 U. of Medicine and Dentistry NJ	50,631	51,030	52,912	54,663	64,547	65,633	76,363	87,921
57 Clemson U.	54,149	56,727	55,942	61,951	72,277	83,599	75,325	87,666
58 Emory U.	55,454	53,931	55,097	54,839	56,354	61,156	66,680	85,155
59 MS State U.	38,987	49,487	49,229	58,406	64,368	78,695	81,446	81,131
60 Yale U.	56,951	57,907	56,412	57,634	60,646	64,687	70,812	79,939
Total, 1st 60 institutions	5,375,900	5,637,116	6,224,758	6,684,431	7,304,632	8,114,618	8,773,272	9,435,202
61 U. CA Riverside	37,412	43,768	51,480	56,776	55,827	62,495	68,742	79,631
62 U. CT all campuses	89,860	94,513	91,337	81,259	79,490	94,940	94,353	78,677
63 SUNY Stony Brook all campuses	46,106	46,807	50,056	50,235	55,045	66,666	75,222	75,923
64 U. UT	22,088	20,635	36,589	42,234	42,127	63,317	70,344	74,082
65 NY U.	55,176	55,864	59,171	55,026	56,055	65,042	60,825	72,983
66 OR State U.	54,715	51,357	51,336	55,824	57,636	60,353	69,071	70,052
67 U. SC all campuses	35,418	27,350	40,850	50,199	57,345	52,526	57,990	69,705
68 U. Cincinnati all campuses	36,052	55,190	63,312	69,388	52,677	61,610	64,846	67,573
69 Princeton U.	40,254	42,994	44,882	46,991	51,263	60,194	70,791	66,684
70 Auburn U. all campuses	58,022	55,957	58,048	60,062	53,486	61,097	66,250	66,343
Total, 1st 70 institutions	5,851,003	6,131,551	6,771,819	7,252,425	7,865,583	8,762,858	9,471,706	10,156,855
71 U. Rochester	32,642	31,981	36,834	43,844	44,274	46,742	67,316	66,303
72 CO State U.	46,956	51,771	49,187	59,728	58,338	50,850	59,836	66,195
73 Harvard U.	72,457	79,396	77,349	54,224	60,174	60,111	71,693	64,760
74 FL State U.	40,113	38,598	42,963	44,012	42,007	48,265	56,742	63,895
75 OK State U. all campuses	56,955	57,926	41,025	48,246	59,929	63,515	64,675	63,887
76 KS State U.	45,837	46,453	51,115	54,232	57,478	60,605	60,032	62,816
77 Mt. Sinai School of Medicine	33,017	30,806	33,862	39,453	43,141	51,658	67,602	59,356
78 U. CO all campuses	74,266	73,784	77,615	82,861	73,932	53,241	56,829	59,352
79 AZ State U. main campus	41,794	45,706	43,040	50,660	53,279	58,182	62,147	58,609
80 Medical U. SC	21,078	13,789	19,321	21,467	24,822	23,811	56,144	56,227
Total, 1st 80 institutions	6,316,118	6,601,761	7,244,130	7,751,152	8,382,957	9,279,838	10,094,722	10,778,255

See explanatory information and SOURCE at end of table.

TABLE B-34. Non-Federal R&D expenditures at universities and colleges, ranked by fiscal year 2002 non-Federal R&D expenditures: fiscal years 1995--2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
81 WA State U.	47,767	49,834	52,670	50,912	52,333	56,355	59,277	56,109
82 U. AR main campus	42,179	43,734	49,096	55,530	45,734	50,039	55,131	55,475
83 TX Tech U.	29,374	29,987	31,744	35,645	38,246	44,783	46,951	54,583
84 U. MA Amherst	33,956	35,709	44,886	46,774	46,699	52,195	48,400	54,562
85 U. CA Santa Barbara	15,294	17,884	26,234	27,354	30,535	37,400	39,544	53,425
86 U. TX Medical Branch Galveston	39,365	35,436	35,677	37,900	38,519	36,539	38,040	51,434
87 U. HI Manoa	34,191	44,300	47,686	61,121	63,392	65,881	59,260	50,941
88 ND State U. all campuses	28,993	31,978	28,765	30,220	32,388	34,600	49,675	50,691
89 Carnegie-Mellon U.	40,901	44,684	43,427	42,404	51,766	46,789	47,419	50,224
90 U. Miami	31,625	33,340	34,372	35,480	37,725	39,162	41,969	50,148
Total, 1st 90 institutions	6,659,763	6,968,647	7,638,687	8,174,492	8,820,294	9,743,581	10,580,388	11,305,847
91 U. AK Fairbanks all campuses	34,931	41,030	42,816	44,101	54,178	55,895	54,908	50,110
92 Columbia U. in the City of New York	38,496	40,751	32,157	37,284	39,429	36,530	36,569	48,654
93 U. NM all campuses	38,457	39,768	39,174	41,545	30,874	33,538	47,114	46,346
94 U. TX Health Science Ctr. San Antonio	32,903	31,825	32,541	30,403	30,900	38,573	44,001	45,855
95 VA Commonwealth U.	29,835	33,564	33,966	32,371	31,610	36,083	41,865	44,591
96 U. ID	34,290	39,717	40,166 i	40,615	38,268	38,333	40,948	43,293
97 Yeshiva U.	22,607e	18,034	18,883	19,000	22,091	37,987	40,430	42,856
98 Southern IL U. Carbondale	19,531	19,742	21,411	22,689	25,509	26,224	32,339	42,815
99 U. NE Medical Ctr.	24,912	28,583	31,375	34,790	37,038	31,669	38,198	42,398
100 U. NH	21,476	22,388	21,758	26,446	27,027	33,187	42,656	42,393
Total, 1st 100 institutions	6,957,201	7,284,049	7,952,934	8,503,736	9,157,218	10,111,600	10,999,416	11,755,158
101 UT State U.	34,037	37,945	41,698	39,325	40,931	45,783	47,108	42,228
102 U. Louisville	13,053	16,349	19,913	24,080	41,515	46,349	47,741	41,996
103 U. Chicago	21,674	21,570	28,848	25,653	27,085	29,806	38,559	41,434
104 Brown U.	18,837	25,482	27,747	29,565	31,054	31,533	33,269	41,267
105 U. TX Houston Health Science Ctr.	19,902	21,347	28,433	31,547	34,019	39,922	36,894	39,704
106 Dartmouth C.	11,466	13,263	18,465	19,911	22,781	22,505	39,252	39,584
107 San Diego State U.	18,851	26,020	20,349	22,194	25,855	32,200	34,711	39,079
108 U. AL Birmingham, The	51,339	44,389	53,257	60,890	66,892	58,152	37,077	38,832
109 U. MA Worcester	25,471	23,143	27,996	29,184	27,524	33,375	31,768	38,737
110 U. ME	16,112	18,473	18,078	20,078	22,289	30,409	40,197	38,417
Total, 1st 110 institutions	7,187,943	7,532,030	8,237,718	8,806,163	9,497,163	10,481,634	11,385,992	12,156,436
111 MT State U.-Bozeman	30,765	32,430	29,733	28,310	29,244	34,760	34,736	38,225
112 Tulane U.	39,394	33,940	36,719	34,934	36,545	37,705	44,092	38,174
113 U. CA Santa Cruz	18,251	19,335	25,423	26,652	27,818	30,253	35,052	38,066
114 Case Western Reserve U.	33,897	33,534	40,833	44,056	42,154	42,471	39,401	37,154
115 U. DE	25,809	24,645	33,064	36,208	38,893	36,995	35,661	36,974
116 U. Central FL	17,070	2,774	25,231	22,028	26,418	33,845	56,945	36,422
117 Tufts U.	26,612	25,848	28,147	30,963	38,036	41,106	34,137	36,055
118 NJ Institute of Technology	15,831	18,549	17,441	19,855	19,855	30,514	25,647	35,783
119 WV U.	22,814	24,044	33,869	37,377	37,128	38,117	41,871	35,591
120 Vanderbilt U.	19,039	21,319	23,854	28,889	32,788	41,940	40,274	35,447
Total, 1st 120 institutions	7,437,425	7,768,448	8,532,032	9,115,435	9,826,042	10,849,340	11,773,808	12,524,327

See explanatory information and SOURCE at end of table.

TABLE B-34. Non-Federal R&D expenditures at universities and colleges, ranked by fiscal year 2002 non-Federal R&D expenditures: fiscal years 1995--2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
121 U. LA Lafayette	11,109	10,493	17,682	18,934	21,305	20,528	19,943	34,871
122 Rush U.	26,198	26,292	25,587	26,833	29,838	35,616	32,918	34,638
123 NM State U. all campuses	24,245	22,941	23,859	20,783	23,002	22,622	25,839	32,764
124 U. VT	21,133	22,138	25,484	26,372	27,964	23,530	26,787	30,322
125 U. VA all campuses	51,435	22,078	31,597	39,962	23,282	24,732	26,679	29,982
126 OR Health Sciences U.	25,297	28,995	29,682	27,228 i	24,774 i	22,321	25,114	28,498
127 Medical C. GA	20,362	24,633	26,821	26,679	27,112	30,386	31,075	28,388
128 U. Houston	22,360	23,730	24,221	20,279	22,927	27,537	29,691	28,252
129 George Washington U.	15,457	18,773	20,976	29,409	16,813	19,673	22,048	27,559
130 TX A&M U. System Health Science Ctr.	--	--	--	--	--	11,415	22,475	27,219
Total, 1st 130 institutions	7,655,021	7,968,521	8,757,941	9,351,914	10,043,059	11,087,700	12,036,377	12,826,820
131 SUNY Albany	14,303	17,852	16,225	16,674	18,036	20,733	23,448	26,996
132 U. NV, Reno	25,406	27,006	31,890	25,093	23,352	29,981	27,843	26,763
133 GA State U.	11,590	12,296	19,525	19,869	22,213	24,510	25,385	25,597
134 U. MD Ctr. for Environmental Science	15,148	15,450	15,137	16,598	18,700	20,800	24,530	25,421
135 U. MD Biotechnology Institute	11,025	15,404	20,398	20,072	17,261	18,789	21,405	23,837
136 Thomas Jefferson U.	16,370	17,679	20,137	17,732	22,041	22,178	24,055	23,757
137 C. of William and Mary all campuses	8,866	12,163	13,140	14,869	19,430	20,268	20,541	21,851
138 SUNY C. of Environmental Science & Forestry	18,718 i	18,948	17,850	19,321	21,511	22,331	23,499	21,707
139 U. WY	25,097	25,562	32,750	30,694	28,088	26,538	21,615	21,615e
140 Woods Hole Oceanographic Institution	7,476	11,195	11,021	10,246	12,188	14,511	15,359	21,506
Total, 1st 140 institutions	7,809,020	8,142,076	8,956,014	9,543,082	10,245,879	11,308,339	12,264,057	13,065,870
141 Boston U.	20,236	22,320	22,870	25,626	17,712	20,299	21,260	21,174
142 Medical C. WI	13,071	12,838	12,265	12,190	14,359	15,547	19,854	20,459
143 CA Institute of Technology	17,293	14,531	13,663	7,318	16,913	25,789	21,531	20,060
144 Wake Forest U.	17,669	19,486	21,003	20,188	22,534	21,255	20,322	19,896
145 U. Memphis, The	10,077	13,475	15,858	16,637	17,916	16,204	18,433	19,553
146 Rensselaer Polytechnic Institute	12,997	13,169	16,018	16,786	16,231	15,207	19,116	19,465
147 Temple U.	26,439	27,813	28,126	34,231	24,206	14,253	18,539	19,273
148 U. of Notre Dame	5,908	5,670	4,943	5,820	6,869	7,162	16,295	19,086
149 OH U. all campuses	12,126	10,283	11,218	11,146	10,893	12,072	14,248	18,924
150 U. Akron all campuses	11,358	10,714	12,853	12,284	9,139	12,414	13,594	18,543
Total, 1st 150 institutions	7,956,194	8,292,375	9,114,831	9,705,308	10,402,651	11,468,541	12,447,249	13,262,303
151 Uniformed Services U. of the Health Sciences	13,754	12,230	9,594	12,762	13,202	12,964	13,142	18,336
152 Brandeis U.	13,710	13,527	14,912	16,491	18,882	21,214	22,787	18,116
153 U. MS all campuses	9,396	10,644	10,535	11,616	13,076 i	16,820	17,181 i	17,746 i
154 U. AR for Medical Sciences	12,272	16,558	18,087	17,630	17,674	19,112	17,702	17,555
155 NM Institute of Mining and Technology	11,137	13,375	11,478	13,832	15,342	14,984	15,137	17,445

See explanatory information and SOURCE at end of table.

TABLE B-34. Non-Federal R&D expenditures at universities and colleges, ranked by fiscal year 2002 non-Federal R&D expenditures: fiscal years 1995--2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
156 U.S. Air Force Academy	52 i	78 i	104 i	130	62	46	314	17,426
157 U. MT, The	8,732	9,830	9,597	8,385	9,745	11,212	14,341	16,755
158 U. MO-Rolla	15,386	12,693	12,815	13,806	17,162	16,164	16,870	16,473
159 U. Toledo	4,249	4,674e	5,792	6,146	6,137	7,382	9,577	15,829
160 FL International U.	3,345	3,441	3,531	3,637	9,304	14,353	20,351	15,597
Total, 1st 160 institutions	8,048,227	8,389,425	9,211,276	9,809,743	10,523,237	11,602,792	12,594,651	13,433,581
161 Eastern VA Medical School	7,999	7,527	8,491	12,223	12,742	11,185	14,861	15,495
162 Wright State U. all campuses	9,042	7,879	7,290	8,844	10,766	16,549	16,616	14,892
163 U. TX Dallas	7,623 i	7,979	7,842	7,096	8,328	8,635	8,635e	14,574
164 Northeastern U.	2,737	3,274	3,501	4,931	7,433	8,424	10,935	14,245
165 Drexel U.	9,945	7,709	8,722	8,674	9,483	10,584	7,539	14,233
166 U. WI Milwaukee	11,935	11,653	11,839	11,871	12,135	11,585	12,403	13,472
167 CO School of Mines	7,738 i	9,757	9,891	11,987	11,011	9,800	11,340	13,285
168 U. MO-Kansas City	7,221	7,510	6,354	6,676	7,125	12,157	10,619	13,265
169 Syracuse U. all campuses	14,598	15,961	10,862	8,122	9,590	10,443	12,440	13,166
170 U. AL Huntsville, The	11,319	12,035	11,086	13,174	15,037	15,335	13,106	12,693
Total, 1st 170 institutions	8,138,384	8,480,709	9,297,154	9,903,341	10,626,887	11,717,489	12,713,145	13,572,901
171 Southern IL U. Edwardsville	1,260 i	1,080 i	900 i	722	1,169	1,144	959	12,630
172 Creighton U.	6,562	6,595	7,998	10,915	11,086	10,300	10,399	12,388
173 SUNY Binghamton	11,447	12,839	13,092	14,549	12,237	12,342	12,600	12,384
174 Wichita State U.	7,140	7,708	9,195	10,471	11,295	10,985	10,416	12,155
175 Old Dominion U.	6,471	8,311	7,847	7,804	9,324	10,150	9,379	12,053
176 MI Technological U.	9,991	11,279	11,199	12,584	11,967	10,554	11,993	12,032
177 CUNY Hunter C.	6,269	8,938	7,142	7,083	8,408	6,397	9,042	11,332
178 MCP Hahnemann U.	17,332	21,067	37,686	34,882	10,235	14,291	9,518	11,326
179 U. PR Mayaguez Campus	22,345	24,934	27,805	29,278	31,864	22,846	9,612	11,074
180 Institute of Paper Science and Technology	7,299	9,489 i	11,678e	11,678e	7,135e	7,135e	10,982	10,982e
Total, 1st 180 institutions	8,234,500	8,592,949	9,431,696	10,043,307	10,741,607	11,823,633	12,808,045	13,691,257
181 SD State U.	7,826	9,425	10,021	9,819	9,513	9,336	11,261	10,970
182 U. AL, The	11,243	9,568	10,553	9,026	11,308	12,361	10,950	10,230
183 Loyola U. (Chicago, IL)	12,889 i	12,534	16,223	16,556	11,413	9,339	10,682	9,929
184 Charles R. Drew U. of Medicine & Science	2,000	1,098	1,153e	1,153e	2,272	9,076	9,302	9,580
185 FL A&M U.	1,367	2,356	2,868	3,340	929	5,334	1,388	9,555
186 SUNY Health Science Ctr. Brooklyn	12,407	11,569 i	10,731	9,199	7,787	8,766	8,766e	9,486 i
187 Georgetown U.	28,093	30,878	34,916	31,810	27,454	34,375	5,602	9,363
188 Miami U. all campuses	4,823	6,214	6,768	4,051	7,662	8,000	9,480	9,258
189 San Jose State U.	9,180 i	9,180 i	9,180 i	9,180e	9,180e	9,180e	8,408	9,226
190 Cleveland State U.	7,039	7,168 i	7,296e	7,515e	8,238e	6,896	9,000	9,206
Total, 1st 190 institutions	8,331,367	8,692,939	9,541,405	10,144,956	10,837,363	11,936,296	12,892,884	13,788,060

See explanatory information and SOURCE at end of table.

TABLE B-34. Non-Federal R&D expenditures at universities and colleges, ranked by fiscal year 2002 non-Federal R&D expenditures: fiscal years 1995--2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
191 Lehigh U.	13,707	12,371	11,569	13,096	14,741	12,780	15,097	9,168
192 Western MI U.	6,280	6,270	6,417	7,509	9,562	9,646	8,784	9,110
193 U. ND all campuses	2,783	4,212	3,124	3,534	3,384	3,463	3,949	8,969
194 Boston C.	3,308	3,367	3,539	4,996	7,234	11,094	10,645	8,927
195 SUNY Upstate Medical U.	6,323	7,329	7,726	7,602	7,210	8,634	8,479	8,922
196 IL Institute of Technology	2,804	4,817	4,514	4,067	3,661	2,808	3,805	8,632
197 LA Tech U.	1,757 i	1,705	3,539 i	5,372	5,372e	7,593	7,744	8,623
198 Rice U.	8,017	6,458	5,666	6,295	6,057	6,696	6,993	8,430
199 FL Atlantic U.	4,133	4,076	2,868	4,683	6,115	7,176	11,012	8,429
200 Brigham Young U. all campuses	5,487	3,039e	2,279e	2,269	12,571	6,859	7,512	8,328
Total, 1st 200 institutions	8,385,966	8,746,583	9,592,646	10,204,379	10,913,270	12,013,045	12,976,904	13,875,598
Total, all other sampled institutions	452,521	458,605	462,469	499,602	529,032	532,097	577,464	623,090

-- = not available.
e = estimated.
i = imputed.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-35. R&D expenditures at universities and colleges, by source of funds: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Federal Govt.	State & local govts.	Industry	Institu-tional funds	Other
Total, all institutions	36,332,641	21,833,953	2,500,649	2,188,111	7,108,773	2,701,155
1 Johns Hopkins U., The [1]	1,140,235	1,022,510	2,612	20,282	50,736	44,095
2 U. CA Los Angeles	787,598	366,762	65,614	31,686	209,948	113,588
3 U. MI all campuses	673,724	444,255	5,298	33,252	135,634	55,285
4 U. WI Madison	662,101	345,003	41,795	16,746	197,769	60,788
5 U. WA	627,273	487,059	11,043	46,702	68,099	14,370
6 U. CA San Francisco	596,965	327,393	24,316	33,577	117,848	93,831
7 U. CA San Diego	585,008	359,383	21,931	32,299	106,112	65,283
8 Stanford U.	538,474	426,620	5,479	39,110	32,629	34,636
9 U. PA	522,269	397,587	2,155	26,994	44,542	50,991
10 Cornell U. all campuses	496,123	270,578	59,239	27,341	90,810	48,155
Total, 1st 10 institutions	6,629,770	4,447,150	239,482	307,989	1,054,127	581,022
11 U. MN all campuses	494,265	295,301	60,705	26,572	74,211	37,476
12 PA State U. all campuses	492,739	284,706	50,876	67,131	90,026	0
13 U. CA Berkeley	474,746	217,297	35,501	24,999	132,412	64,537
14 U. CA Davis	456,653	176,644	45,075	20,754	170,742	43,438
15 MA Institute of Technology	455,491	330,409	150	88,626	7,301	29,005
16 Duke U.	441,533	261,356	11,258	99,807	37,325	31,787
17 TX A&M U. all campuses	436,681	163,488	110,703	33,300	122,752	6,438
18 OH State U. all campuses	432,387	177,883	51,438	51,135	110,350	41,581
19 U. IL Urbana-Champaign	427,174	214,323	53,173	11,796	131,437	16,445
20 Washington U. St. Louis	416,960	303,441	7,537	16,100	59,522	30,360
Total, 1st 20 institutions	11,158,399	6,871,998	665,898	748,209	1,990,205	882,089
21 Baylor C. of Medicine	411,924	259,475	3,047	18,729	59,501	71,172
22 Columbia U. in the City of New York	405,403	356,749	1,825	3,110	16,939	26,780
23 Harvard U.	401,367	336,607	2,192	10,215	0	52,353
24 U. Pittsburgh all campuses	400,200	306,913	7,307	13,023	39,025	33,932
25 U. CO all campuses	399,818	340,466	2,991	11,822	27,211	17,328
26 U. AZ	390,827	211,772	8,101	23,104	125,437	22,413
27 U. FL	386,316	167,108	71,547	19,017	113,585	15,059
28 U. Southern CA	372,397	266,645	15,278	24,321	66,153	0
29 U. NC Chapel Hill	370,806	254,571	14,984	6,601	94,650	0
30 Yale U.	354,243	274,304	1,042	13,025	22,334	43,538
Total, 1st 30 institutions	15,051,700	9,646,608	794,212	891,176	2,555,040	1,164,664
31 GA Institute of Technology all campuses	340,347	165,680	10,229	55,802	108,636	0
32 U. MD College Park	324,980	194,095	20,359	5,078	96,933	8,515
33 U. TX Austin	320,966	219,158	19,381	26,114	41,650	14,663
34 IN U. all campuses	299,080	132,759	5,636	5,312	111,502	43,871
35 NC State U.	290,018	75,204	85,879	31,579	89,769	7,587
36 MI State U.	289,787	122,595	48,810	11,458	95,848	11,076
37 U. IA	288,808	180,743	7,523	19,169	61,941	19,432
38 LA State U. all campuses	287,363	97,928	81,063	16,394	69,987	21,991
39 Purdue U. all campuses	285,778	107,477	45,043	29,614	103,541	103
40 U. GA	284,660	78,086	55,027	15,387	135,190	970
Total, 1st 40 institutions	18,063,487	11,020,333	1,173,162	1,107,083	3,470,037	1,292,872

See explanatory information and SOURCE at end of table.

TABLE B-35. R&D expenditures at universities and colleges, by source of funds: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Federal Govt.	State & local govts.	Industry	Institu-tional funds	Other
41 Northwestern U.	282,154	178,607	3,107	12,214	64,266	23,960
42 Emory U.	271,238	186,083	3,588	9,282	25,373	46,912
43 U. MD Baltimore	266,822	117,017	27,202	51,562	36,105	34,936
44 U. TX Southwestern Medical Ctr. Dallas	263,958	155,258	17,072	12,836	7,573	71,219
45 U. TX M. D. Anderson Cancer Ctr.	262,145	117,633	0	33,407	71,155	39,950
46 U. Rochester	261,601	195,298	7,691	24,645	21,696	12,271
47 U. IL Chicago	259,852	143,183	9,812	9,325	76,958	20,574
48 Rutgers The State U. NJ all campuses	258,829	91,205	30,958	11,772	95,020	29,874
49 U. AL Birmingham, The	255,053	216,221	102	8,368	16,807	13,555
50 SUNY Buffalo all campuses	239,735	128,842	9,677	12,726	55,482	33,008
Total, 1st 50 institutions	20,684,874	12,549,680	1,282,371	1,293,220	3,940,472	1,619,131
51 U. KY all campuses	236,275	100,426	40,041	7,810	73,834	14,164
52 VA Polytechnic Institute & State U.	232,560	82,976	63,402	20,866	54,497	10,819
53 U. Chicago	225,264	183,830	5,139	2,285	13,738	20,272
54 NY U.	222,978	149,995	5,529	5,902	33,041	28,511
55 CA Institute of Technology	220,004	199,944	534	9,989	9,537	0
56 Case Western Reserve U.	219,042	181,888	3,390	5,555	14,049	14,160
57 U. Cincinnati all campuses	217,739	150,166	6,777	4,549	41,687	14,560
58 U. UT	216,707	142,625	2,592	5,819	36,420	29,251
59 U. CA Irvine	209,469	115,548	10,407	14,261	40,677	28,576
60 Vanderbilt U.	208,305	172,858	17	3,302	25,444	6,684
Total, 1st 60 institutions	22,893,217	14,029,936	1,420,199	1,373,558	4,283,396	1,786,128
61 Wayne State U.	199,007	95,910	12,547	11,163	57,388	21,999
62 U. South FL	197,894	84,108	10,179	8,215	76,208	19,184
63 Boston U.	192,612	171,438	650	8,935	0	11,589
64 IA State U.	188,664	71,419	48,427	16,047	49,753	3,018
65 U. TN system	188,261	88,344	37,015	14,520	33,602	14,780
66 Carnegie-Mellon U.	188,191	137,967	445	25,261	4,250	20,268
67 Mt. Sinai School of Medicine	185,335	125,979	3,412	12,203	17,856	25,885
68 SUNY Stony Brook all campuses	184,045	108,122	4,207	5,947	54,255	11,514
69 U. VA all campuses	182,340	152,358	2,646	9,026	8,761	9,549
70 CO State U.	178,845	112,650	18,584	10,034	30,334	7,243
Total, 1st 70 institutions	24,778,411	15,178,231	1,558,311	1,494,909	4,615,803	1,931,157
71 U. of Medicine and Dentistry NJ	178,156	90,235	13,964	12,125	41,918	19,914
72 U. MO-Columbia	177,011	77,742	17,048	5,042	71,132	6,047
73 U. KS all campuses	172,131	82,663	6,939	5,098	65,338	12,093
74 U. CT all campuses	172,003	93,326	7,603	9,889	44,202	16,983
75 U. NE Lincoln	171,431	51,405	4,689	6,805	103,879	4,653
76 U. Miami	171,319	121,171	4,989	17,262	7,746	20,151
77 U. OK all campuses	169,373	69,388	14,813	12,660	57,554	14,958
78 Rockefeller U.	166,603	67,559	6,491	2,916	59,279	30,358
79 Princeton U.	164,408	97,724	4,575	8,292	41,713	12,104
80 U. HI Manoa	161,823	110,882	29,126	9,957	11,858	0
Total, 1st 80 institutions	26,482,669	16,040,326	1,668,548	1,584,955	5,120,422	2,068,418

See explanatory information and SOURCE at end of table.

TABLE B-35. R&D expenditures at universities and colleges, by source of funds: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Federal Govt.	State & local govts.	Industry	Institu-tional funds	Other
81 OR State U.	161,735	91,683	36,648	467	27,345	5,592
82 OR Health Sciences U.	158,729	130,231	3,730	10,626	1,634	12,508
83 MS State U.	158,652	77,521	31,720	6,366	43,045	0
84 Yeshiva U.	157,124	114,268	0	0	42,856	0
85 U. NM all campuses	150,598	104,252	2,498	1,427	36,973	5,448
86 U. TX Houston Health Science Ctr.	138,380	98,676	3,808	11,241	11,128	13,527
87 Clemson U.	134,840	47,174	19,669	12,035	55,444	518
88 FL State U.	134,351	70,456	8,456	1,176	49,541	4,722
89 U. MA Worcester	132,729	93,992	27,891	3,275	0	7,571
90 Medical U. SC	132,030	75,803	948	9,939	33,710	11,630
Total, 1st 90 institutions	27,941,837	16,944,382	1,803,916	1,641,507	5,422,098	2,129,934
91 U. CA Santa Barbara	131,795	78,370	3,193	10,482	24,491	15,259
92 U. TX Health Science Ctr. San Antonio	129,616	83,761	6,207	8,847	22,602	8,199
93 U. TX Medical Branch Galveston	129,534	78,100	12,441	5,737	20,942	12,314
94 Dartmouth C.	126,839	87,255	3,220	4,425	19,220	12,719
95 U. SC all campuses	123,108	53,403	5,180	5,050	54,541	4,934
96 AZ State U. main campus	123,016	64,407	2,955	7,095	44,303	4,256
97 UT State U.	121,621	79,393	18,901	3,298	15,655	4,374
98 U. AK Fairbanks all campuses	116,279	66,169	3,117	22,907	24,086	0
99 WA State U.	112,469	56,360	5,034	3,801	35,734	11,540
100 U. CA Riverside	111,936	32,305	7,307	3,358	57,000	11,966
Total, 1st 100 institutions	29,168,050	17,623,905	1,871,471	1,716,507	5,740,672	2,215,495
101 Wake Forest U.	111,634	91,738	698	12,510	580	6,108
102 VA Commonwealth U.	109,619	65,028	2,507	9,053	28,672	4,359
103 Brown U.	109,482	68,215	113	2,172	34,264	4,718
104 U. MA Amherst	109,332	54,770	4,185	5,417	35,959	9,001
105 Tufts U.	109,291	73,236	2,312	8,888	13,073	11,782
106 Auburn U. all campuses	108,775	42,432	1,350	4,178	56,756	4,059
107 KS State U.	106,804	43,988	35,903	5,659	18,032	3,222
108 NM State U. all campuses	103,078	70,314	8,405	3,131	19,683	1,545
109 Tulane U.	102,998	64,824	5,812	13,555	14,368	4,439
110 Thomas Jefferson U.	102,974	79,217	2,968	13,209	1,933	5,647
Total, 1st 110 institutions	30,242,037	18,277,667	1,935,724	1,794,279	5,963,992	2,270,375
111 Woods Hole Oceanographic Institution	99,964	78,458	1,460	32	2,943	17,071
112 Medical C. WI	96,700	76,241	171	1,642	9,785	8,861
113 Georgetown U.	96,450	87,087	857	4,330	3,929	247
114 OK State U. all campuses	94,987	31,100	24,091	3,752	35,029	1,015
115 U. NH	93,222	50,829	4,650	5,964	23,011	8,768
116 U. VT	88,602	58,280	4,359	7,157	14,381	4,425
117 George Washington U.	86,288	58,729	2,392	6,456	1,298	17,413
118 U. DE	85,157	48,183	3,933	5,661	18,239	9,141
119 WV U.	84,985	49,394	1,917	6,795	26,879	0
120 U. AR main campus	83,063	27,588	34,668	6,370	11,977	2,460
Total, 1st 120 institutions	31,151,455	18,843,556	2,014,222	1,842,438	6,111,463	2,339,776

See explanatory information and SOURCE at end of table.

TABLE B-35. R&D expenditures at universities and colleges, by source of funds: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Federal Govt.	State & local govts.	Industry	Institu-tional funds	Other
121 TX Tech U.	82,785	28,202	25,151	6,774	17,596	5,062
122 U. Louisville	80,974	38,978	3,614	739	22,982	14,661
123 Rush U.	79,394	44,756	37	10,108	21,565	2,928
124 MT State U.-Bozeman	78,211	39,986	19,487	6,161	12,577	0
125 U. ID	76,758	33,465	20,635	3,809	17,776	1,073
126 ND State U. all campuses	72,105	21,414	1,614	1,801	43,654	3,622
127 U. NE Medical Ctr.	71,000	28,602	3,161	7,165	20,279	11,793
128 U. CA Santa Cruz	70,967	32,901	1,132	1,084	26,524	9,326
129 U. MS all campuses	67,838 i	50,092 i	5,235 i	2,412 i	5,506 i	4,593 i
130 SUNY Albany	67,493	40,497	8,974	1,337	9,381	7,304
Total, 1st 130 institutions	31,898,980	19,202,449	2,103,262	1,883,828	6,309,303	2,400,138
131 U. NV, Reno	66,721	39,958	2,763	1,204	21,377	1,419
132 U. Central FL	66,351	29,929	4,007	5,499	26,916	0
133 San Diego State U.	64,302	25,223	8,716	1,059	23,221	6,083
134 Temple U.	63,850	44,577	1,159	5,030	7,168	5,916
135 U. ME	62,149	23,732	10,366	4,030	20,983	3,038
136 NJ Institute of Technology	61,424	25,641	9,429	688	16,009	9,657
137 U. Houston	59,707	31,455	10,522	3,784	7,626	6,320
138 Southern IL U. Carbondale	53,604	10,789	12,516	4,108	21,890	4,301
139 U. RI	53,347	45,453	6,145	353	1,356	40
140 U. of Notre Dame	52,371	33,285	3,352	7,076	8,658	0
Total, 1st 140 institutions	32,502,806	19,512,491	2,172,237	1,916,659	6,464,507	2,436,912
141 Medical C. GA	51,705	23,317	1,616	2,793	21,944	2,035
142 TX A&M U. System Health Science Ctr.	49,636	22,417	12,302	2,005	7,782	5,130
143 Charles R. Drew U. of Medicine & Science	48,839	39,259	6,629	2,941	10	0
144 U. AL Huntsville, The	48,353	35,660	123	2,179	10,391	0
145 Rice U.	48,169	39,739	2,696	1,600	0	4,134
146 U. LA Lafayette	47,796	12,925	5,999	0	9,827	19,045
147 FL International U.	47,654	32,057	7,630	3,131	557	4,279
148 Brandeis U.	47,122	29,006	118	0	7,397	10,601
149 U. Dayton	46,554	40,191	768	3,772	1,659	164
150 Rensselaer Polytechnic Institute	45,955	26,490	4,554	5,142	6,041	3,728
Total, 1st 150 institutions	32,984,589	19,813,552	2,214,672	1,940,222	6,530,115	2,486,028
151 Syracuse U. all campuses	45,870	32,704	5,551	1,280	1,740	4,595
152 Naval Postgraduate School	45,227 i	44,379 i	282 i	380 i	0 i	186 i
153 U. AR for Medical Sciences	45,046	27,491	3,844	2,676	6,314	4,721
154 GA State U.	44,564	18,967	7,341	988	14,596	2,672
155 Drexel U.	44,465	30,232	826	795	11,268	1,344
156 U. OR	43,723	37,177	331	68	3,692	2,455
157 U. WY	41,632e	20,017e	2,038e	2,581e	16,216e	780e
158 C. of William and Mary all campuses	39,858	18,007	4,252	1,043	14,423	2,133
159 U. MT, The	39,367	22,612	2,110	1,252	11,635	1,758
160 George Mason U.	38,849	31,890	765	625	2,766	2,803
Total, 1st 160 institutions	33,413,190	20,097,028	2,242,012	1,951,910	6,612,765	2,509,475

See explanatory information and SOURCE at end of table.

TABLE B-35. R&D expenditures at universities and colleges, by source of funds: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Federal Govt.	State & local govts.	Industry	Institu-tional funds	Other
161 Northeastern U.	38,540	24,295	884	7,487	5,874	0
162 U. MD Ctr. for Environmental Science	38,501	13,080	4,664	100	16,359	4,298
163 MCP Hahnemann U.	37,945	26,619	4,811	2,867	71	3,577
164 Loyola U. (Chicago, IL)	37,607	27,678	867	1,075	4,147	3,840
165 U. AL, The	37,130	26,900	2,115	2,224	5,891	0
166 OH U. all campuses	36,601	17,677	2,809	2,729	12,106	1,280
167 U. MD Baltimore County	36,323	29,376	936	1,970	2,387	1,654
168 NM Institute of Mining and Technology	36,309	18,864	2,568	6,378	7,793	706
169 St. Louis U. all campuses	35,444	31,215	277	3,161	589	202
170 Howard U.	35,387	33,949	39	1,399	0	0
Total, 1st 170 institutions	33,782,977	20,346,681	2,261,982	1,981,300	6,667,982	2,525,032
171 SUNY Health Science Ctr. Brooklyn	34,981 i	25,495 i	248 i	1,934 i	4,431 i	2,873 i
172 U. MD Biotechnology Institute	34,440	10,603	1,956	3,167	15,726	2,988
173 U. ND all campuses	33,973	25,004	955	4,704	3,310	0
174 U. Memphis, The	33,625	14,072	3,279	268	14,040	1,966
175 U. MO-Rolla	32,222	15,749	120	4,283	11,577	493
176 Boston C.	31,754	22,827	346	2,479	3,842	2,260
177 FL A&M U.	31,147	21,592	6,335	3,220	0	0
178 Wright State U. all campuses	30,962	16,070	2,685	3,812	8,057	338
179 U. NV, Las Vegas	30,527	22,367	786	1,585	5,789	0
180 MI Technological U.	30,005	17,973	1,511	2,899	7,210	412
Total, 1st 180 institutions	34,106,613	20,538,433	2,280,203	2,009,651	6,741,964	2,536,362
181 Desert Research Institute	29,465	22,760	2,376	1,331	1,204	1,794
182 Old Dominion U.	29,223	17,170	6,299	3,318	2,436	0
183 U. PR Medical Sciences Campus	29,089	23,931	100	1,495	3,347	216
184 Uniformed Services U. of the Health Sciences	28,630	10,294	0	0	18,336	0
185 Eastern VA Medical School	28,572	13,077	112	3,926	110	11,347
186 U. Akron all campuses	28,080	9,537	2,194	2,568	9,360	4,421
187 CO School of Mines	26,515	13,230	1,964	11,001	320	0
188 SUNY C. of Environmental Science & Forestry	26,337	4,630	3,113	1,156	16,446	992
189 U. TX Dallas	26,198	11,624	7,336	3,367	851	3,020
190 CUNY Hunter C.	25,905	14,573	3,918	19	5,271	2,124
Total, 1st 190 institutions	34,384,627	20,679,259	2,307,615	2,037,832	6,799,645	2,560,276
191 U. Southern MS	25,685	22,398	853	1,905	529	0
192 U.S. Air Force Academy	25,589	8,163	0	86	17,340	0
193 Jackson State U.	25,445	21,721	0	0	3,724	0
194 NY Medical C.	25,222	19,318	454	3,802	50	1,598
195 San Jose State U.	25,003	15,777	5,448	2,432	1,020	326

See explanatory information and SOURCE at end of table.

TABLE B-35. R&D expenditures at universities and colleges, by source of funds: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Federal Govt.	State & local govts.	Industry	Institu-tional funds	Other
196 U. WI Milwaukee	24,933	11,461	3,498	297	7,894	1,783
197 U. Toledo	24,825	8,996	318	1,988	8,733	4,790
198 U. MO-Kansas City	24,060	10,795	210	1,371	10,784	900
199 Loma Linda U.	23,996	20,114	466	746	796	1,874
200 FL Atlantic U.	23,995	15,566	2,023	6,406	0	0
Total, 1st 200 institutions	34,633,380	20,833,568	2,320,885	2,056,865	6,850,515	2,571,547
Total, all other sampled institutions	1,699,261	1,000,385	179,764	131,246	258,258	129,608

[1] Johns Hopkins University includes the Applied Physics Laboratory.

e = estimated.
i = imputed.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-36. R&D expenditures at public universities and colleges, by source of funds: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Federal Govt.	State & local govts.	Industry	Institu-tional funds	Other
Total, all institutions	24,830,706	13,367,288	2,249,577	1,461,887	5,994,753	1,757,201
1 U. CA Los Angeles	787,598	366,762	65,614	31,686	209,948	113,588
2 U. MI all campuses	673,724	444,255	5,298	33,252	135,634	55,285
3 U. WI Madison	662,101	345,003	41,795	16,746	197,769	60,788
4 U. WA	627,273	487,059	11,043	46,702	68,099	14,370
5 U. CA San Francisco	596,965	327,393	24,316	33,577	117,848	93,831
6 U. CA San Diego	585,008	359,383	21,931	32,299	106,112	65,283
7 U. MN all campuses	494,265	295,301	60,705	26,572	74,211	37,476
8 PA State U. all campuses	492,739	284,706	50,876	67,131	90,026	0
9 U. CA Berkeley	474,746	217,297	35,501	24,999	132,412	64,537
10 U. CA Davis	456,653	176,644	45,075	20,754	170,742	43,438
Total, 1st 10 institutions	5,851,072	3,303,803	362,154	333,718	1,302,801	548,596
11 TX A&M U. all campuses	436,681	163,488	110,703	33,300	122,752	6,438
12 OH State U. all campuses	432,387	177,883	51,438	51,135	110,350	41,581
13 U. IL Urbana-Champaign	427,174	214,323	53,173	11,796	131,437	16,445
14 U. Pittsburgh all campuses	400,200	306,913	7,307	13,023	39,025	33,932
15 U. CO all campuses	399,818	340,466	2,991	11,822	27,211	17,328
16 U. AZ	390,827	211,772	8,101	23,104	125,437	22,413
17 U. FL	386,316	167,108	71,547	19,017	113,585	15,059
18 U. NC Chapel Hill	370,806	254,571	14,984	6,601	94,650	0
19 GA Institute of Technology all campuses	340,347	165,680	10,229	55,802	108,636	0
20 U. MD College Park	324,980	194,095	20,359	5,078	96,933	8,515
Total, 1st 20 institutions	9,760,608	5,500,102	712,986	564,396	2,272,817	710,307
21 U. TX Austin	320,966	219,158	19,381	26,114	41,650	14,663
22 IN U. all campuses	299,080	132,759	5,636	5,312	111,502	43,871
23 NC State U.	290,018	75,204	85,879	31,579	89,769	7,587
24 MI State U.	289,787	122,595	48,810	11,458	95,848	11,076
25 U. IA	288,808	180,743	7,523	19,169	61,941	19,432
26 LA State U. all campuses	287,363	97,928	81,063	16,394	69,987	21,991
27 Purdue U. all campuses	285,778	107,477	45,043	29,614	103,541	103
28 U. GA	284,660	78,086	55,027	15,387	135,190	970
29 U. MD Baltimore	266,822	117,017	27,202	51,562	36,105	34,936
30 U. TX Southwestern Medical Ctr. Dallas	263,958	155,258	17,072	12,836	7,573	71,219
Total, 1st 30 institutions	12,637,848	6,786,327	1,105,622	783,821	3,025,923	936,155
31 U. TX M. D. Anderson Cancer Ctr.	262,145	117,633	0	33,407	71,155	39,950
32 U. IL Chicago	259,852	143,183	9,812	9,325	76,958	20,574
33 Rutgers The State U. NJ all campuses	258,829	91,205	30,958	11,772	95,020	29,874
34 U. AL Birmingham, The	255,053	216,221	102	8,368	16,807	13,555
35 SUNY Buffalo all campuses	239,735	128,842	9,677	12,726	55,482	33,008
36 U. KY all campuses	236,275	100,426	40,041	7,810	73,834	14,164
37 VA Polytechnic Institute & State U.	232,560	82,976	63,402	20,866	54,497	10,819
38 U. Cincinnati all campuses	217,739	150,166	6,777	4,549	41,687	14,560
39 U. UT	216,707	142,625	2,592	5,819	36,420	29,251
40 U. CA Irvine	209,469	115,548	10,407	14,261	40,677	28,576
Total, 1st 40 institutions	15,026,212	8,075,152	1,279,390	912,724	3,588,460	1,170,486

See explanatory information and SOURCE at end of table.

TABLE B-36. R&D expenditures at public universities and colleges, by source of funds: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Federal Govt.	State & local govts.	Industry	Institu-tional funds	Other
41 Wayne State U.	199,007	95,910	12,547	11,163	57,388	21,999
42 U. South FL	197,894	84,108	10,179	8,215	76,208	19,184
43 IA State U.	188,664	71,419	48,427	16,047	49,753	3,018
44 U. TN system	188,261	88,344	37,015	14,520	33,602	14,780
45 SUNY Stony Brook all campuses	184,045	108,122	4,207	5,947	54,255	11,514
46 U. VA all campuses	182,340	152,358	2,646	9,026	8,761	9,549
47 CO State U.	178,845	112,650	18,584	10,034	30,334	7,243
48 U. of Medicine and Dentistry NJ	178,156	90,235	13,964	12,125	41,918	19,914
49 U. MO-Columbia	177,011	77,742	17,048	5,042	71,132	6,047
50 U. KS all campuses	172,131	82,663	6,939	5,098	65,338	12,093
Total, 1st 50 institutions	16,872,566	9,038,703	1,450,946	1,009,941	4,077,149	1,295,827
51 U. CT all campuses	172,003	93,326	7,603	9,889	44,202	16,983
52 U. NE Lincoln	171,431	51,405	4,689	6,805	103,879	4,653
53 U. OK all campuses	169,373	69,388	14,813	12,660	57,554	14,958
54 U. HI Manoa	161,823	110,882	29,126	9,957	11,858	0
55 OR State U.	161,735	91,683	36,648	467	27,345	5,592
56 OR Health Sciences U.	158,729	130,231	3,730	10,626	1,634	12,508
57 MS State U.	158,652	77,521	31,720	6,366	43,045	0
58 U. NM all campuses	150,598	104,252	2,498	1,427	36,973	5,448
59 U. TX Houston Health Science Ctr.	138,380	98,676	3,808	11,241	11,128	13,527
60 Clemson U.	134,840	47,174	19,669	12,035	55,444	518
Total, 1st 60 institutions	18,450,130	9,913,241	1,605,250	1,091,414	4,470,211	1,370,014
61 FL State U.	134,351	70,456	8,456	1,176	49,541	4,722
62 U. MA Worcester	132,729	93,992	27,891	3,275	0	7,571
63 Medical U. SC	132,030	75,803	948	9,939	33,710	11,630
64 U. CA Santa Barbara	131,795	78,370	3,193	10,482	24,491	15,259
65 U. TX Health Science Ctr. San Antonio	129,616	83,761	6,207	8,847	22,602	8,199
66 U. TX Medical Branch Galveston	129,534	78,100	12,441	5,737	20,942	12,314
67 U. SC all campuses	123,108	53,403	5,180	5,050	54,541	4,934
68 AZ State U. main campus	123,016	64,407	2,955	7,095	44,303	4,256
69 UT State U.	121,621	79,393	18,901	3,298	15,655	4,374
70 U. AK Fairbanks all campuses	116,279	66,169	3,117	22,907	24,086	0
Total, 1st 70 institutions	19,724,209	10,657,095	1,694,539	1,169,220	4,760,082	1,443,273
71 WA State U.	112,469	56,360	5,034	3,801	35,734	11,540
72 U. CA Riverside	111,936	32,305	7,307	3,358	57,000	11,966
73 VA Commonwealth U.	109,619	65,028	2,507	9,053	28,672	4,359
74 U. MA Amherst	109,332	54,770	4,185	5,417	35,959	9,001
75 Auburn U. all campuses	108,775	42,432	1,350	4,178	56,756	4,059
76 KS State U.	106,804	43,988	35,903	5,659	18,032	3,222
77 NM State U. all campuses	103,078	70,314	8,405	3,131	19,683	1,545
78 OK State U. all campuses	94,987	31,100	24,091	3,752	35,029	1,015
79 U. NH	93,222	50,829	4,650	5,964	23,011	8,768
80 U. VT	88,602	58,280	4,359	7,157	14,381	4,425
Total, 1st 80 institutions	20,763,033	11,162,501	1,792,330	1,220,690	5,084,339	1,503,173

See explanatory information and SOURCE at end of table.

TABLE B-36. R&D expenditures at public universities and colleges, by source of funds: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Federal Govt.	State & local govts.	Industry	Institu-tional funds	Other
81 U. DE	85,157	48,183	3,933	5,661	18,239	9,141
82 WV U.	84,985	49,394	1,917	6,795	26,879	0
83 U. AR main campus	83,063	27,588	34,668	6,370	11,977	2,460
84 TX Tech U.	82,785	28,202	25,151	6,774	17,596	5,062
85 U. Louisville	80,974	38,978	3,614	739	22,982	14,661
86 MT State U.-Bozeman	78,211	39,986	19,487	6,161	12,577	0
87 U. ID	76,758	33,465	20,635	3,809	17,776	1,073
88 ND State U. all campuses	72,105	21,414	1,614	1,801	43,654	3,622
89 U. NE Medical Ctr.	71,000	28,602	3,161	7,165	20,279	11,793
90 U. CA Santa Cruz	70,967	32,901	1,132	1,084	26,524	9,326
Total, 1st 90 institutions	21,549,038	11,511,214	1,907,642	1,267,049	5,302,822	1,560,311
91 U. MS all campuses	67,838 i	50,092 i	5,235 i	2,412 i	5,506 i	4,593 i
92 SUNY Albany	67,493	40,497	8,974	1,337	9,381	7,304
93 U. NV, Reno	66,721	39,958	2,763	1,204	21,377	1,419
94 U. Central FL	66,351	29,929	4,007	5,499	26,916	0
95 San Diego State U.	64,302	25,223	8,716	1,059	23,221	6,083
96 Temple U.	63,850	44,577	1,159	5,030	7,168	5,916
97 U. ME	62,149	23,732	10,366	4,030	20,983	3,038
98 NJ Institute of Technology	61,424	25,641	9,429	688	16,009	9,657
99 U. Houston	59,707	31,455	10,522	3,784	7,626	6,320
100 Southern IL U. Carbondale	53,604	10,789	12,516	4,108	21,890	4,301
Total, 1st 100 institutions	22,182,477	11,833,107	1,981,329	1,296,200	5,462,899	1,608,942
101 U. RI	53,347	45,453	6,145	353	1,356	40
102 Medical C. GA	51,705	23,317	1,616	2,793	21,944	2,035
103 TX A&M U. System Health Science Ctr.	49,636	22,417	12,302	2,005	7,782	5,130
104 U. AL Huntsville, The	48,353	35,660	123	2,179	10,391	0
105 U. LA Lafayette	47,796	12,925	5,999	0	9,827	19,045
106 FL International U.	47,654	32,057	7,630	3,131	557	4,279
107 Naval Postgraduate School	45,227 i	44,379 i	282 i	380 i	0 i	186 i
108 U. AR for Medical Sciences	45,046	27,491	3,844	2,676	6,314	4,721
109 GA State U.	44,564	18,967	7,341	988	14,596	2,672
110 U. OR	43,723	37,177	331	68	3,692	2,455
Total, 1st 110 institutions	22,659,528	12,132,950	2,026,942	1,310,773	5,539,358	1,649,505
111 U. WY	41,632e	20,017e	2,038e	2,581e	16,216e	780e
112 C. of William and Mary all campuses	39,858	18,007	4,252	1,043	14,423	2,133
113 U. MT, The	39,367	22,612	2,110	1,252	11,635	1,758
114 George Mason U.	38,849	31,890	765	625	2,766	2,803
115 U. MD Ctr. for Environmental Science	38,501	13,080	4,664	100	16,359	4,298
116 U. AL, The	37,130	26,900	2,115	2,224	5,891	0
117 OH U. all campuses	36,601	17,677	2,809	2,729	12,106	1,280
118 U. MD Baltimore County	36,323	29,376	936	1,970	2,387	1,654
119 NM Institute of Mining and Technology	36,309	18,864	2,568	6,378	7,793	706
120 SUNY Health Science Ctr. Brooklyn	34,981 i	25,495 i	248 i	1,934 i	4,431 i	2,873 i
Total, 1st 120 institutions	23,039,079	12,356,868	2,049,447	1,331,609	5,633,365	1,667,790

See explanatory information and SOURCE at end of table.

TABLE B-36. R&D expenditures at public universities and colleges, by source of funds: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Federal Govt.	State & local govts.	Industry	Institu-tional funds	Other
121 U. MD Biotechnology Institute	34,440	10,603	1,956	3,167	15,726	2,988
122 U. ND all campuses	33,973	25,004	955	4,704	3,310	0
123 U. Memphis, The	33,625	14,072	3,279	268	14,040	1,966
124 U. MO-Rolla	32,222	15,749	120	4,283	11,577	493
125 FL A&M U.	31,147	21,592	6,335	3,220	0	0
126 Wright State U. all campuses	30,962	16,070	2,685	3,812	8,057	338
127 U. NV, Las Vegas	30,527	22,367	786	1,585	5,789	0
128 MI Technological U.	30,005	17,973	1,511	2,899	7,210	412
129 Desert Research Institute	29,465	22,760	2,376	1,331	1,204	1,794
130 Old Dominion U.	29,223	17,170	6,299	3,318	2,436	0
Total, 1st 130 institutions	23,354,668	12,540,228	2,075,749	1,360,196	5,702,714	1,675,781
131 U. PR Medical Sciences Campus	29,089	23,931	100	1,495	3,347	216
132 Uniformed Services U. of the Health Sciences	28,630	10,294	0	0	18,336	0
133 U. Akron all campuses	28,080	9,537	2,194	2,568	9,360	4,421
134 CO School of Mines	26,515	13,230	1,964	11,001	320	0
135 SUNY C. of Environmental Science & Forestry	26,337	4,630	3,113	1,156	16,446	992
136 U. TX Dallas	26,198	11,624	7,336	3,367	851	3,020
137 CUNY Hunter C.	25,905	14,573	3,918	19	5,271	2,124
138 U. Southern MS	25,685	22,398	853	1,905	529	0
139 U.S. Air Force Academy	25,589	8,163	0	86	17,340	0
140 Jackson State U.	25,445	21,721	0	0	3,724	0
Total, 1st 140 institutions	23,622,141	12,680,329	2,095,227	1,381,793	5,778,238	1,686,554
141 San Jose State U.	25,003	15,777	5,448	2,432	1,020	326
142 U. WI Milwaukee	24,933	11,461	3,498	297	7,894	1,783
143 U. Toledo	24,825	8,996	318	1,988	8,733	4,790
144 U. MO-Kansas City	24,060	10,795	210	1,371	10,784	900
145 FL Atlantic U.	23,995	15,566	2,023	6,406	0	0
146 U. TX El Paso	23,684	16,457	3,965	2,040	1,222	0
147 U. MA Lowell	22,827	14,932	854	5,294	1,747	0
148 SUNY Upstate Medical U.	22,326	13,404	1,701	910	840	5,471
149 SUNY Binghamton	21,343	8,959	1,312	2,654	2,900	5,518
150 SD State U.	20,085	9,115	8,295	225	1,050	1,400
Total, 1st 150 institutions	23,855,222	12,805,791	2,122,851	1,405,410	5,814,428	1,706,742
Total, all other sampled institutions	975,484	561,497	126,726	56,477	180,325	50,459

e = estimated.
i = imputed.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-37. R&D expenditures at private universities and colleges, by source of funds: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Federal Govt.	State & local govts.	Industry	Institu-tional funds	Other
Total, all institutions	11,501,935	8,466,665	251,072	726,224	1,114,020	943,954
1 Johns Hopkins U., The [1]	1,140,235	1,022,510	2,612	20,282	50,736	44,095
2 Stanford U.	538,474	426,620	5,479	39,110	32,629	34,636
3 U. PA	522,269	397,587	2,155	26,994	44,542	50,991
4 Cornell U. all campuses	496,123	270,578	59,239	27,341	90,810	48,155
5 MA Institute of Technology	455,491	330,409	150	88,626	7,301	29,005
6 Duke U.	441,533	261,356	11,258	99,807	37,325	31,787
7 Washington U. St. Louis	416,960	303,441	7,537	16,100	59,522	30,360
8 Baylor C. of Medicine	411,924	259,475	3,047	18,729	59,501	71,172
9 Columbia U. in the City of New York	405,403	356,749	1,825	3,110	16,939	26,780
10 Harvard U.	401,367	336,607	2,192	10,215	0	52,353
Total, 1st 10 institutions	5,229,779	3,965,332	95,494	350,314	399,305	419,334
11 U. Southern CA	372,397	266,645	15,278	24,321	66,153	0
12 Yale U.	354,243	274,304	1,042	13,025	22,334	43,538
13 Northwestern U.	282,154	178,607	3,107	12,214	64,266	23,960
14 Emory U.	271,238	186,083	3,588	9,282	25,373	46,912
15 U. Rochester	261,601	195,298	7,691	24,645	21,696	12,271
16 U. Chicago	225,264	183,830	5,139	2,285	13,738	20,272
17 NY U.	222,978	149,995	5,529	5,902	33,041	28,511
18 CA Institute of Technology	220,004	199,944	534	9,989	9,537	0
19 Case Western Reserve U.	219,042	181,888	3,390	5,555	14,049	14,160
20 Vanderbilt U.	208,305	172,858	17	3,302	25,444	6,684
Total, 1st 20 institutions	7,867,005	5,954,784	140,809	460,834	694,936	615,642
21 Boston U.	192,612	171,438	650	8,935	0	11,589
22 Carnegie-Mellon U.	188,191	137,967	445	25,261	4,250	20,268
23 Mt. Sinai School of Medicine	185,335	125,979	3,412	12,203	17,856	25,885
24 U. Miami	171,319	121,171	4,989	17,262	7,746	20,151
25 Rockefeller U.	166,603	67,559	6,491	2,916	59,279	30,358
26 Princeton U.	164,408	97,724	4,575	8,292	41,713	12,104
27 Yeshiva U.	157,124	114,268	0	0	42,856	0
28 Dartmouth C.	126,839	87,255	3,220	4,425	19,220	12,719
29 Wake Forest U.	111,634	91,738	698	12,510	580	6,108
30 Brown U.	109,482	68,215	113	2,172	34,264	4,718
Total, 1st 30 institutions	9,440,552	7,038,098	165,402	554,810	922,700	759,542
31 Tufts U.	109,291	73,236	2,312	8,888	13,073	11,782
32 Tulane U.	102,998	64,824	5,812	13,555	14,368	4,439
33 Thomas Jefferson U.	102,974	79,217	2,968	13,209	1,933	5,647
34 Woods Hole Oceanographic Institution	99,964	78,458	1,460	32	2,943	17,071
35 Medical C. WI	96,700	76,241	171	1,642	9,785	8,861
36 Georgetown U.	96,450	87,087	857	4,330	3,929	247
37 George Washington U.	86,288	58,729	2,392	6,456	1,298	17,413
38 Rush U.	79,394	44,756	37	10,108	21,565	2,928
39 U. of Notre Dame	52,371	33,285	3,352	7,076	8,658	0
40 Charles R. Drew U. of Medicine & Science	48,839	39,259	6,629	2,941	10	0
Total, 1st 40 institutions	10,315,821	7,673,190	191,392	623,047	1,000,262	827,930

See explanatory information and SOURCE at end of table.

TABLE B-37. R&D expenditures at private universities and colleges, by source of funds: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Federal Govt.	State & local govts.	Industry	Institu-tional funds	Other
41 Rice U.	48,169	39,739	2,696	1,600	0	4,134
42 Brandeis U.	47,122	29,006	118	0	7,397	10,601
43 U. Dayton	46,554	40,191	768	3,772	1,659	164
44 Rensselaer Polytechnic Institute	45,955	26,490	4,554	5,142	6,041	3,728
45 Syracuse U. all campuses	45,870	32,704	5,551	1,280	1,740	4,595
46 Drexel U.	44,465	30,232	826	795	11,268	1,344
47 Northeastern U.	38,540	24,295	884	7,487	5,874	0
48 MCP Hahnemann U.	37,945	26,619	4,811	2,867	71	3,577
49 Loyola U. (Chicago, IL)	37,607	27,678	867	1,075	4,147	3,840
50 St. Louis U. all campuses	35,444	31,215	277	3,161	589	202
Total, 1st 50 institutions	10,743,492	7,981,359	212,744	650,226	1,039,048	860,115
51 Howard U.	35,387	33,949	39	1,399	0	0
52 Boston C.	31,754	22,827	346	2,479	3,842	2,260
53 Eastern VA Medical School	28,572	13,077	112	3,926	110	11,347
54 NY Medical C.	25,222	19,318	454	3,802	50	1,598
55 Loma Linda U.	23,996	20,114	466	746	796	1,874
56 Morehouse School of Medicine	23,956	21,919	24	1,350	663	0
57 Catholic U. America	22,883	17,925	54	182	3,928	794
58 Lehigh U.	22,687	13,519	5,592	1,680	1,770	126
59 Brigham Young U. all campuses	21,228	12,900	1,222	2,129	3,259	1,718
60 Meharry Medical C.	20,508	20,453	0	5	2	48
Total, 1st 60 institutions	10,999,685	8,177,360	221,053	667,924	1,053,468	879,880
61 IL Institute of Technology	19,909	11,277	4,303	0	1,187	3,142
62 Creighton U.	18,982	6,594	1,817	7,122	3,364	85
63 Clark Atlanta U.	17,194	15,325	39	0	898	932
64 Institute of Paper Science and Technology	13,929e	2,947e	827e	6,828e	2,892e	435e
65 Stevens Institute of Technology	13,855e	8,094e	3,035e	0e	0e	2,726e
66 Rochester Institute of Technology	13,500	7,868	1,515	2,633	0	1,484
67 Albany Medical C.	13,104	8,901	211	188	2,626	1,178
68 Mercer U. all campuses	12,998	8,607	99	1,986	2,306	0
69 U. Tulsa	11,603	6,806	860	3,061	876	0
70 Hampton U.	11,067	10,058	0	80	891	38
Total, 1st 70 institutions	11,145,826	8,263,837	233,759	689,822	1,068,508	889,900
71 Polytechnic U.	10,915	4,918	1,824	2,825	1,144	204
72 U. Denver	10,539	8,386	503	348	636	666
73 Worcester Polytechnic Institute	10,493	5,013	35	2,166	1,916	1,363
74 Teachers C. Columbia U.	10,409	5,939	0	0	0	4,470
75 Tuskegee U.	9,965	7,703	0	0	0	2,262
76 Marquette U.	9,807	3,565	3,793	860	691	898
77 Southern Methodist U.	9,774	6,026	519	1,060	1,560	609
78 Miles C.	8,785	7,943	842	0	0	0
79 Finch U. of Health Sciences/Chicago Medical School	8,645	5,638	0	25	2,252	730
80 Clarkson U.	8,322e	4,286e	762e	1,566e	1,708e	0e
Total, 1st 80 institutions	11,243,480	8,323,254	242,037	698,672	1,078,415	901,102

See explanatory information and SOURCE at end of table.

TABLE B-37. R&D expenditures at private universities and colleges, by source of funds: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Federal Govt.	State & local govts.	Industry	Institu-tional funds	Other
81 Rose-Hulman Institute of Technology	7,912	744	0	56	0	7,112
82 Harvey Mudd C.	7,306 i	1,316 i	105 i	520 i	641 i	4,724 i
83 Universidad Central Del Caribe	7,103	6,470	298	0	333	2
84 Alfred U. all campuses	6,916	946	1,210	3,249	1,189	322
85 FL Institute of Technology	6,669	3,646	717	1,495	778	33
86 Xavier U. LA	6,413	6,019	20	43	331	0
87 Duquesne U.	5,955	2,232	410	203	2,929	181
88 New School U.	5,791e	1,083e	0e	0e	0e	4,708e
89 Wesleyan U.	5,614	3,734	11	11	1,231	627
90 Wellesley C.	5,498e	3,446e	0e	188e	0e	1,864e
Total, 1st 90 institutions	11,308,657	8,352,890	244,808	704,437	1,085,847	920,675
91 Villanova U.	5,481e	4,551e	240	690	0	0
92 Embry-Riddle Aeronautical U.	5,102	4,174	50	745	105	28
93 American U.	4,420	3,467	20	56	141	736
94 Ponce School of Medicine	4,365	3,720	0	645	0	0
95 U. Scranton	3,873	3,715	0	116	42	0
96 Baylor U.	3,868	830	658	1,051	739	590
97 Fordham U.	3,793	1,990	130	0	371	1,302
98 Bryn Mawr C.	3,502	751	489	15	1,851	396
99 Clark U.	3,418	3,418	0	0	0	0
100 Nova Southeastern U.	3,327	1,959	608	0	89	671
Total, 1st 100 institutions	11,349,806	8,381,465	247,003	707,755	1,089,185	924,398
Total, all other sampled institutions	152,129	85,200	4,069	18,469	24,835	19,556

[1] Johns Hopkins University includes the Applied Physics Laboratory.

e = estimated.
i = imputed.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-38. Industry-sponsored R&D expenditures at universities and colleges, ranked by fiscal year 2002 industry-sponsored R&D expenditures: fiscal years 1995-2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
Total, all institutions	1,488,973	1,605,338	1,736,749	1,888,254	2,029,743	2,152,871	2,213,929	2,188,111
1 Duke U.	32,560	42,797	48,178	65,114	121,630	109,791	104,063	99,807
2 MA Institute of Technology	52,757	62,699	59,204	60,538	75,444	83,082	97,256	88,626
3 PA State U. all campuses	50,225	52,771	56,666	63,319	65,698	64,393	67,658	67,131
4 GA Institute of Technology all campuses	26,104	39,136	48,094	58,377	62,752	64,508	59,691	55,802
5 U. MD Baltimore	17,797	19,450	18,581	20,783	11,572	29,892	41,226	51,562
6 OH State U. all campuses	21,827	30,870	36,685	40,401	52,034	57,075	54,736	51,135
7 U. WA	36,892	36,180	37,744	38,370	51,319	57,405	43,312	46,702
8 Stanford U.	16,446	19,167	23,839	27,404	31,516	41,013	35,012	39,110
9 U. CA San Francisco	13,890	16,989	26,931	34,369	36,830	34,964	35,759	33,577
10 U. TX M. D. Anderson Cancer Ctr.	0	0	0	0	0	20,271	26,717	33,407
Total, 1st 10 institutions	268,498	320,059	355,922	408,675	508,795	562,394	565,430	566,859
11 TX A&M U. all campuses	31,452	26,947	31,816	33,674	34,722	31,084	35,110	33,300
12 U. MI all campuses	28,987	34,975	31,411	33,029	34,432	35,515	34,439	33,252
13 U. CA San Diego	11,363	15,130	23,725	27,010	31,356	34,541	36,845	32,299
14 U. CA Los Angeles	14,892	15,788	23,144	28,310	34,404	33,427	32,539	31,686
15 NC State U.	26,264	26,067	26,834	31,429	31,478	32,804	37,858	31,579
16 Purdue U. all campuses	25,147	25,720	26,090	26,988	28,856	29,997	29,765	29,614
17 Cornell U. all campuses	17,752	14,915	8,215	11,253	12,053	12,697	22,261	27,341
18 U. PA	11,900	9,445	18,964	25,593	30,269	32,632	28,227	26,994
19 U. MN all campuses	23,427	23,726	24,196	24,094	23,933	26,392	26,454	26,572
20 U. TX Austin	3,257 i	15,029	29,887	31,326	39,729	24,740	30,310	26,114
Total, 1st 20 institutions	462,939	527,801	600,204	681,381	810,027	856,223	879,238	865,610
21 Carnegie-Mellon U.	17,763	21,521	18,016	19,136	17,761	21,136	23,491	25,261
22 U. CA Berkeley	13,842	15,128	21,253	20,902	21,928	27,851	26,791	24,999
23 U. Rochester	12,810	11,605	14,147	17,653	18,226	17,595	23,782	24,645
24 U. Southern CA	17,668	21,592	21,606	24,125	23,111	25,298	22,949	24,321
25 U. AZ	15,300	13,106	14,964	16,392	16,660	22,412	22,934	23,104
26 U. AK Fairbanks all campuses	5,470	9,965	12,769	16,081	19,340	19,686	28,352	22,907
27 VA Polytechnic Institute & State U.	11,500	11,365	11,385	12,132	13,287	14,869	18,355	20,866
28 U. CA Davis	8,053	9,387	10,731	14,238	16,242	17,891	16,989	20,754
29 Johns Hopkins U., The	10,652	12,388	13,917	14,761	15,317	15,751	18,737	20,282
30 U. IA	11,359	14,862	15,712	17,262	20,778	17,262	21,394	19,169
Total, 1st 30 institutions	587,356	668,720	754,704	854,063	992,677	1,055,974	1,103,012	1,091,918
31 U. FL	10,611	23,532	25,217	21,393	28,183	34,879	17,183	19,017
32 Baylor C. of Medicine	12,217	13,655	14,420	16,588	19,400	17,578	18,389	18,729
33 U. Miami	11,831	12,321	12,200	13,338	15,752	17,028	17,554	17,262
34 U. WI Madison	12,948	13,871	14,832	14,371	14,172	16,127	17,237	16,746
35 LA State U. all campuses	10,432	11,298	13,331	12,157	13,187	15,108	16,648	16,394
36 Washington U. St. Louis	21,977	18,700	21,205	19,869	19,964	22,691	24,865	16,100
37 IA State U.	8,017	7,407	8,499	13,717	14,905	15,075	13,177	16,047
38 U. GA	10,595	9,861	10,283	10,534	11,034	12,276	13,791	15,387
39 U. TN system	11,077	11,759	12,675	12,551	15,093	12,740	15,391	14,520
40 U. CA Irvine	9,139	10,391	12,712	15,981	16,539	18,615	15,803	14,261
Total, 1st 40 institutions	706,200	801,515	900,078	1,004,562	1,160,906	1,238,091	1,273,050	1,256,381

See explanatory information and SOURCE at end of table.

TABLE B-38. Industry-sponsored R&D expenditures at universities and colleges, ranked by fiscal year 2002 industry-sponsored R&D expenditures: fiscal years 1995-2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
41 Tulane U.	10,115	11,276	12,913	10,734	11,914	10,340	8,654	13,555
42 Thomas Jefferson U.	8,105	9,553	9,851	10,155	12,081	12,324	12,326	13,209
43 Yale U.	13,623	15,322	16,629	15,829	15,242	14,355	14,119	13,025
44 U. Pittsburgh all campuses	8,208	7,880	9,753	10,436	12,990	14,676	14,817	13,023
45 U. TX Southwestern Medical Ctr. Dallas	14,986	13,801	12,737	13,926	16,197	14,861	13,320	12,836
46 SUNY Buffalo all campuses	13,390	13,186	14,480	3,021	5,485	5,590	11,598	12,726
47 U. OK all campuses	5,630	6,650	6,871	7,661	7,756	9,499	10,396	12,660
48 Wake Forest U.	11,144	12,697	16,246	15,546	16,320	15,125	13,330	12,510
49 Northwestern U.	7,257	9,378	10,498	13,292	14,168	12,860	14,294	12,214
50 Mt. Sinai School of Medicine	5,571	3,288	6,994	7,588	9,257	12,141	18,133	12,203
Total, 1st 50 institutions	804,229	904,546	1,017,050	1,112,750	1,282,316	1,359,862	1,404,037	1,384,342
51 U. of Medicine and Dentistry NJ	8,164	7,741	8,519	8,841	10,736	10,001	13,496	12,125
52 Clemson U.	5,469	5,887	5,253	6,641	8,445	9,768	11,582	12,035
53 U. CO all campuses	7,607	8,902	9,403	9,963	9,867	9,356	9,002	11,822
54 U. IL Urbana-Champaign	11,832	12,365	11,761	13,636	12,864	12,693	10,992	11,796
55 Rutgers The State U. NJ all campuses	7,797	7,079	8,848	9,038	9,833	8,843	10,965	11,772
56 MI State U.	7,853	6,818	6,973	7,250	7,647	11,230	10,953	11,458
57 U. TX Houston Health Science Ctr.	6,212	7,403	9,780	11,106	12,872	13,029	10,945	11,241
58 Wayne State U.	7,973	8,977	10,959	11,207	10,660	10,932	10,860	11,163
59 CO School of Mines	6,601 i	8,114	8,038	9,877	9,292	7,870	9,466	11,001
60 OR Health Sciences U.	4,685	4,597	7,036	1,757 i	1,599 i	12,430	11,538	10,626
Total, 1st 60 institutions	878,422	982,429	1,103,620	1,202,066	1,376,131	1,466,014	1,513,836	1,499,381
61 U. CA Santa Barbara	2,576	2,988	3,106	3,809	4,742	5,499	6,001	10,482
62 Harvard U.	8,395 i	12,522	11,588	10,361	11,790	12,189	14,056	10,215
63 Rush U.	4,970	5,872	7,232	8,911	8,154	8,762	9,128	10,108
64 CO State U.	5,736	6,320	5,712	6,155	7,213	6,519	8,850	10,034
65 CA Institute of Technology	5,105	4,447	3,789	2,001	6,332	8,919	10,225	9,989
66 U. HI Manoa	299	8,088	5,944	10,949	13,021	11,158	7,232	9,957
67 Medical U. SC	6,026	1,134	1,371	2,737	2,202	2,880	7,168	9,939
68 U. CT all campuses	6,640	8,026	8,572	9,905	10,355	13,540	9,819	9,889
69 U. IL Chicago	6,174	6,746	6,947	9,424	9,683	11,010	10,989	9,325
70 Emory U.	11,473	6,383	6,700	7,670	7,794	7,513	7,950	9,282
Total, 1st 70 institutions	935,816	1,044,955	1,164,581	1,273,988	1,457,417	1,554,003	1,605,254	1,598,601
71 VA Commonwealth U.	6,074	7,435	9,172	8,478	8,062	7,495	8,522	9,053
72 U. VA all campuses	15,442	4,552	7,627	12,428	4,891	6,954	7,733	9,026
73 Boston U.	8,804	8,726	8,916	9,461	7,601	8,574	8,450	8,935
74 Tufts U.	4,687e	4,970	5,344	5,560	7,027	8,118	7,726	8,888
75 U. TX Health Science Ctr. San Antonio	8,922	9,021	9,051	10,845	10,777	10,707	9,677	8,847
76 U. AL Birmingham, The	19,219	17,354	16,233	16,842	10,181	7,752	8,443	8,368
77 Princeton U.	6,335	4,483	4,441	5,242	5,965	6,881	8,246	8,292
78 U. South FL	4,782	3,282	3,747	5,397	6,236	10,873	11,152	8,215
79 U. KY all campuses	12,011	13,374	11,259	13,668	15,109	11,213	12,933	7,810
80 Northeastern U.	2,334	2,072	2,827	3,530	2,981	3,567	5,530	7,487
Total, 1st 80 institutions	1,024,426	1,120,224	1,243,198	1,365,439	1,536,247	1,636,137	1,693,666	1,683,522

See explanatory information and SOURCE at end of table.

TABLE B-38. Industry-sponsored R&D expenditures at universities and colleges, ranked by fiscal year 2002 industry-sponsored R&D expenditures: fiscal years 1995-2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
81 U. NE Medical Ctr.	3,903	4,286	3,941	5,471	5,445	5,486	5,929	7,165
82 U. VT	5,467	5,231	5,399	5,513	7,112	5,713	6,434	7,157
83 Creighton U.	3,885	4,517	5,094	6,475	6,242	6,084	5,942	7,122
84 AZ State U. main campus	7,169	2,758	3,376	4,609	4,267	4,700	5,641	7,095
85 U. of Notre Dame	2,665	3,511	1,979	2,020	2,920	2,279	3,631	7,076
86 Institute of Paper Science and Technology	1,235	1,606 i	1,976e	1,976e	1,250 i	1,250 i	6,828	6,828e
87 U. NE Lincoln	3,145	3,465	4,651	4,721e	5,466	5,991	5,908	6,805
88 WV U.	3,160	3,608	3,719	4,547	5,532	7,185	6,328	6,795
89 TX Tech U.	5,441	5,634	5,650	5,549	5,682	5,946	6,236	6,774
90 U. NC Chapel Hill	2,403	2,592	3,311	4,860	5,886	6,835	6,971	6,601
Total, 1st 90 institutions	1,062,899	1,157,432	1,282,294	1,411,180	1,586,049	1,687,606	1,753,514	1,752,940
91 George Washington U.	4,314	5,704	7,865	7,575	4,001	4,220	5,081	6,456
92 FL Atlantic U.	1,777	1,776	1,922	3,981	5,681	6,387	9,580	6,406
93 NM Institute of Mining and Technology	5,165	6,895	4,723	6,385	7,034	6,373	6,204	6,378
94 U. AR main campus	4,809	4,474	4,130	5,145	6,198	4,746	4,224	6,370
95 MS State U.	6,165	7,599	5,469	7,470	7,892	7,955	6,744	6,366
96 MT State U.-Bozeman	5,143	5,489	6,976	7,378 i	7,079	8,523	7,041	6,161
97 U. NH	1,723	1,315	1,600	3,635	4,395	4,923	7,751	5,964
98 SUNY Stony Brook all campuses	5,850	5,848	7,119	6,908	7,416	7,567	7,026	5,947
99 NY U.	6,461	10,461	8,502	8,391	7,502	7,767	6,535	5,902
100 U. UT	4,319	3,825	10,374	10,007	8,951	7,940	6,023	5,819
Total, 1st 100 institutions	1,108,625	1,210,818	1,340,974	1,478,055	1,652,198	1,754,007	1,819,723	1,814,709
101 U. TX Medical Branch Galveston	5,991	6,008	7,301	5,319	6,366	6,146	6,020	5,737
102 U. DE	3,681	2,964	3,361	3,859	4,152	3,757	5,041	5,661
103 KS State U.	2,701	2,243	2,943	3,445	3,746	4,057	4,943	5,659
104 Case Western Reserve U.	5,427	5,784	5,662	6,984	6,157	5,890	6,190	5,555
105 U. Central FL	2,272	1,207	9,800	4,019	4,873	5,833	5,288	5,499
106 U. MA Amherst	4,760	5,738	5,778	6,236	5,796	5,535	6,181	5,417
107 IN U. all campuses	5,815	5,357	4,242	6,333	4,820	5,384	6,375	5,312
108 U. MA Lowell	3,599	5,779	4,920	5,099	6,234	7,204	6,911	5,294
109 Rensselaer Polytechnic Institute	6,135	6,210	9,340	10,974	10,084	6,581	5,928	5,142
110 U. KS all campuses	8,149	9,356	8,201	8,281	14,393	15,712	4,155	5,098
Total, 1st 110 institutions	1,157,155	1,261,464	1,402,522	1,538,604	1,718,819	1,820,106	1,876,755	1,869,083
111 U. MD College Park	25,431	24,044	5,009	2,127	3,053	1,028	7,315	5,078
112 U. SC all campuses	7,869	3,657	2,058	2,022	2,176	2,822	4,239	5,050
113 U. MO-Columbia	10,114	3,158	3,777	4,348	3,832	4,007	4,654	5,042
114 Temple U.	5,458	5,173	4,690	8,855	1,284	188	5,400	5,030
115 U. ND all campuses	1,814	2,971	2,166	2,357	2,308	2,356	2,458	4,704
116 U. Cincinnati all campuses	8,630	16,697	22,907	24,388	5,989	5,166	6,028	4,549
117 Dartmouth C.	2,196	2,571	3,280	2,574	4,544	4,274	4,389	4,425
118 Georgetown U.	6,148	6,737	8,421	9,383	7,939	9,795	4,996	4,330
119 U. MO-Rolla	1,316	2,364	1,575	1,361	2,079	2,543	3,088	4,283
120 Auburn U. all campuses	3,243	4,212	4,644	4,452	3,649	3,917	4,683	4,178
Total, 1st 120 institutions	1,229,374	1,333,048	1,461,049	1,600,471	1,755,672	1,856,202	1,924,005	1,915,752

See explanatory information and SOURCE at end of table.

TABLE B-38. Industry-sponsored R&D expenditures at universities and colleges, ranked by fiscal year 2002 industry-sponsored R&D expenditures: fiscal years 1995-2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
121 Southern IL U. Carbondale	2,325	2,033	1,954	2,306	2,462	2,355	5,484	4,108
122 U. ME	4,158	4,214	5,609	7,074	2,324	2,899	3,562	4,030
123 Eastern VA Medical School	5,975	5,039	5,762	7,448	8,561	6,044	6,264	3,926
124 Wright State U. all campuses	1,641	1,250	1,409	1,325	1,717	2,968	3,269	3,812
125 U. ID	5,977	6,478	6,551 i	6,496	1,903	2,764	3,634	3,809
126 NY Medical C.	1,792	1,532	1,810	2,461	3,742	3,294	3,626	3,802
127 WA State U.	2,537	3,149	3,138	3,158	3,158	4,579	4,438	3,801
128 U. Houston	1,600	1,341	1,815	1,707	1,762	1,689	1,992	3,784
129 U. Dayton	5,834	6,160	5,541	6,285	4,454	5,598	5,138	3,772
130 OK State U. all campuses	2,902	2,334	3,252	2,887	3,447	4,076	3,688	3,752
Total, 1st 130 institutions	1,264,115	1,366,578	1,497,890	1,641,618	1,789,202	1,892,468	1,965,100	1,954,348
131 U. TX Dallas	1,166 i	1,113	1,275	981	1,336	4,715	4,715e	3,367
132 U. CA Riverside	1,109	1,702	1,905	1,929	3,893	3,345	4,227	3,358
133 Old Dominion U.	1,771	2,233	2,357	1,974	2,787	3,533	2,885	3,318
134 Vanderbilt U.	3,124	3,097	2,583	4,036	3,730	4,063	3,036	3,302
135 UT State U.	3,322	4,614	3,356	2,744	3,998	7,885	6,595	3,298
136 U. MA Worcester	2,492	1,146	2,129	2,631	4,265	3,467	3,317	3,275
137 Alfred U. all campuses	1,967	1,755	1,633	1,946	2,414	3,066	3,244	3,249
138 FL A&M U.	159	0	0	0	0	0	0	3,220
139 U. MD Biotechnology Institute	781	870	927	986	848	915	2,103	3,167
140 St. Louis U. all campuses	2,087	2,483	2,618	2,733	3,113	3,018	3,196	3,161
Total, 1st 140 institutions	1,282,093	1,385,591	1,516,673	1,661,578	1,815,586	1,926,475	1,998,418	1,987,063
141 FL International U.	512	527	543	559	729	1,843	8,397	3,131
142 NM State U. all campuses	2,444	2,556	2,393	2,843	2,892	3,466	4,272	3,131
143 Columbia U. in the City of New York	1,478	2,559	1,637	3,018	2,630	3,362	2,885	3,110
144 U. Tulsa	2,921	2,820	3,913	2,772	3,561	3,179	3,258	3,061
145 East Carolina U.	1,624	1,441	1,476	1,996	2,627	3,158	3,853	3,055
146 Charles R. Drew U. of Medicine & Science	300	1,098	1,153e	1,153e	1,046	1,103	1,055	2,941
147 Rockefeller U.	2,660	2,800	2,577	2,641	2,707	2,775	2,844	2,916
148 MI Technological U.	2,840	3,636	3,819	3,747	3,578	3,834	4,176	2,899
149 MCP Hahnemann U.	4,675	5,060	8,525	6,835	1,552	2,967	2,604	2,867
150 Wichita State U.	584	532	763	378	1,043	3,500	3,220	2,830
Total, 1st 150 institutions	1,302,131	1,408,620	1,543,472	1,687,520	1,837,951	1,955,662	2,034,982	2,017,004
151 Polytechnic U.	1,566	2,857	3,074	2,093	2,135	2,100	2,510	2,825
152 Institute of Textile Technology	2,586	2,742	2,792	2,650	2,161	2,357	3,039	2,816
153 Medical C. GA	3,484	2,995	2,578	3,072	3,603	3,609	3,478	2,793
154 OH U. all campuses	2,526	2,322	2,132	1,948	2,843	1,591	2,022	2,729
155 U. AR for Medical Sciences	2,884	3,733	3,440	3,040	3,889	3,321	2,900	2,676
156 SUNY Binghamton	2,074	1,799	1,516	2,726	3,584	3,327	2,493	2,654
157 Rochester Institute of Technology	1,122	1,246	1,395	1,462e	769	917	2,705	2,633
158 U. WY	1,930	2,086	2,226	3,114	3,206	2,941	2,581	2,581e
159 U. Akron all campuses	3,542	3,313	3,411	2,767	2,150	3,090	2,557	2,568
160 ID State U.	1,431	3,479	2,332	1,055	1,915	2,256	2,060	2,554
Total, 1st 160 institutions	1,325,276	1,435,192	1,568,368	1,711,447	1,864,206	1,981,171	2,061,327	2,043,833

See explanatory information and SOURCE at end of table.

TABLE B-38. Industry-sponsored R&D expenditures at universities and colleges, ranked by fiscal year 2002 industry-sponsored R&D expenditures: fiscal years 1995-2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
161 Boston C.	404	280	205	577	934	1,487	2,050	2,479
162 San Jose State U.	4,324 i	4,324 i	4,324 i	4,324e	4,324e	4,324e	3,126	2,432
163 U. MS all campuses	1,621	1,920	1,817	1,887	2,238 i	2,034	2,163 i	2,412 i
164 U. TX Arlington	3,205	3,245	2,641	2,642	2,220	700	787	2,288
165 U. Chicago	1,679	1,306	1,634	1,684	1,621	1,462	1,746	2,285
166 U. AL, The	1,920	1,407	1,345	1,301	1,577	1,941	1,989	2,224
167 TN Technological U.	1,488	1,367	1,252	2,492	1,715	690	1,957	2,205
168 U. AL Huntsville, The	3,390	4,752	5,110	5,883	5,071	4,532	4,956	2,179
169 Brown U.	1,057	1,716	1,506	1,603	1,795	1,530	1,777	2,172
170 Worcester Polytechnic Institute	627	619	1,185	1,485	870	1,380	1,059	2,166
Total, 1st 170 institutions	1,344,991	1,456,128	1,589,387	1,735,325	1,886,571	2,001,251	2,082,937	2,066,675
171 Brigham Young U. all campuses	1,815	1,006 i	820 i	751	2,781	2,028	2,384	2,129
172 U. MA Dartmouth	248	325	412	831	771	652	517	2,120
173 U. TX El Paso	247	428	522	776	697	941	1,321	2,040
174 TX A&M U. System Health Science Ctr.	--	--	--	--	--	2,704	1,050	2,005
175 U. Toledo	1,467	1,613 i	1,241	934	1,245	2,013	2,025	1,988
176 Mercer U. all campuses	823	1,651	1,292	1,718	1,280	1,405	1,115	1,986
177 U. MD Baltimore County	1,231	1,803	2,484	2,858	2,649	2,159	2,131	1,970
178 CUNY City C.	1,322	1,039	2,668	950	1,531	1,659	1,602	1,967
179 SUNY Health Science Ctr. Brooklyn	5,232	4,808 i	4,385	3,045	2,261	1,787	1,787e	1,934 i
180 U. Southern MS	644	1,081	708	805	996	984	807	1,905
Total, 1st 180 institutions	1,358,020	1,469,882	1,603,919	1,747,993	1,900,782	2,017,583	2,097,676	2,086,719
181 ND State U. all campuses	1,532	1,534	1,273	1,449	1,300	2,044	3,784	1,801
182 CA State U. Chico	1,485	1,141	1,321	770	1,136	630	943	1,747
183 Cleveland State U.	1,246	1,184 i	1,291 i	1,330e	1,448 i	969	1,447	1,747
184 Oakland U.	868	1,068	1,002	889	1,002	1,002e	1,370	1,731
185 Lehigh U.	6,767	6,832	6,790	6,074	6,669	5,636	5,532	1,680
186 Medical C. WI	2,222	3,019	2,757	1,692	2,151	1,931	2,126	1,642
187 Rice U.	2,726	1,898	1,779	1,435	1,645	2,858	1,720	1,600
188 U. NV, Las Vegas	1,828	1,443	2,058	2,461	2,596	2,131	1,938	1,585
189 Clarkson U.	1,698	1,779	1,512	1,500	1,226	1,447	1,566	1,566e
190 Northern IL U.	2,127	2,222	1,201	837	709	1,050	1,356	1,550
Total, 1st 190 institutions	1,380,519	1,492,002	1,624,903	1,766,430	1,920,664	2,037,281	2,119,458	2,103,368
191 Western MI U.	1,077	1,403	1,460	1,600	1,648	1,650	858	1,530
192 FL Institute of Technology	1,999 i	2,354	1,040	1,822	1,091	920	1,420	1,495
193 U. PR Medical Sciences Campus	0	0	311	2,548	602	954	1,121	1,495
194 U. NM all campuses	3,087	2,389	2,799	3,331	2,940	1,853	1,821	1,427
195 Howard U.	2,342	1,057	1,059	1,519	1,774	1,874	2,108	1,399

See explanatory information and SOURCE at end of table.

TABLE B-38. Industry-sponsored R&D expenditures at universities and colleges, ranked by fiscal year 2002 industry-sponsored R&D expenditures: fiscal years 1995-2002

(Dollars in thousands)

Institution and ranking	1995	1996	1997	1998	1999	2000	2001	2002
196 U. MO-Kansas City	636	154	348	505	427	660	1,665	1,371
197 Morehouse School of Medicine	600	700	721	742	129	677	1,047	1,350
198 SUNY Albany	1,709	1,904	1,533	1,426	1,337	622	1,017	1,337
199 Desert Research Institute	3,357	5,200	1,600	1,500	1,226	844	802	1,331
200 Smith C.	0 i	0 i	0	26	0	1,747	1,240	1,303
Total, 1st 200 institutions	1,395,326	1,507,163	1,635,774	1,781,449	1,931,838	2,049,082	2,132,557	2,117,406
Total, all other sampled institutions	93,647	98,175	100,975	106,805	97,905	103,789	81,372	70,705

-- = not available.
e = estimated.
i = imputed.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-39. R&D expenditures at universities and colleges, by science and engineering field: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
Total, all institutions	36,332,641	5,504,227	3,008,466	2,022,423	1,512,515	21,404,172	670,622	1,582,888	627,328
1 Johns Hopkins U., The [1]	1,140,235	349,481	115,899	35,791	96,354	496,025	3,371	8,193	35,121
2 U. CA Los Angeles	787,598	51,371	68,211	14,824	15,320	573,899	11,188	42,971	9,814
3 U. MI all campuses	673,724	159,890	27,653	5,524	11,553	364,265	12,259	92,279	301
4 U. WI Madison	662,101	89,683	50,449	34,220	15,674	410,300	24,743	36,982	50
5 U. WA	627,273	58,244	28,015	71,330	11,575	436,160	8,718	13,231	0
6 U. CA San Francisco	596,965	0	27,262	0	0	569,703	0	0	0
7 U. CA San Diego	585,008	61,208	38,999	114,136	58,623	293,994	6,182	10,532	1,334
8 Stanford U.	538,474	126,204	63,387	8,809	20,292	304,658	4,837	10,287	0
9 U. PA	522,269	18,291	23,609	775	12,434	422,686	3,504	34,590	6,380
10 Cornell U. all campuses	496,123	56,309	66,273	6,117	26,015	314,857	7,055	19,497	0
Total, 1st 10 institutions	6,629,770	970,681	509,757	291,526	267,840	4,186,547	81,857	268,562	53,000
11 U. MN all campuses	494,265	47,353	22,614	12,055	15,333	372,169	9,768	14,973	0
12 PA State U. all campuses	492,739	193,590	56,959	27,679	11,105	163,590	12,634	25,408	1,774
13 U. CA Berkeley	474,746	137,766	78,918	7,069	7,980	170,348	9,823	51,204	11,638
14 U. CA Davis	456,653	42,674	21,445	29,532	4,793	336,796	1,188	16,578	3,647
15 MA Institute of Technology	455,491	171,606	99,254	22,007	46,468	74,762	823	5,793	34,778
16 Duke U.	441,533	19,253	16,837	9,425	6,423	367,043	3,783	18,769	0
17 TX A&M U. all campuses	436,681	142,887	29,238	81,950	13,689	155,557	3,078	7,510	2,772
18 OH State U. all campuses	432,387	102,029	28,251	9,231	33,369	214,313	7,876	30,963	6,355
19 U. IL Urbana-Champaign	427,174	104,577	48,218	36,157	78,629	121,383	9,485	24,875	3,850
20 Washington U. St. Louis	416,960	8,256	12,556	4,971	6,734	374,666	3,039	5,863	875
Total, 1st 20 institutions	11,158,399	1,940,672	924,047	531,602	492,363	6,537,174	143,354	470,498	118,689
21 Baylor C. of Medicine	411,924	0	0	0	0	411,924	0	0	0
22 Columbia U. in the City of New York	405,403	19,666	32,054	52,455	9,505	280,697	3,098	7,158	770
23 Harvard U.	401,367	6,773	35,156	15,095	4,287	307,150	6,168	26,738	0
24 U. Pittsburgh all campuses	400,200	17,438	13,707	609	4,610	344,239	5,669	13,915	13
25 U. CO all campuses	399,818	32,911	58,379	60,896	7,091	219,454	8,246	12,032	809
26 U. AZ	390,827	47,738	77,860	10,219	10,768	222,892	3,342	17,987	21
27 U. FL	386,316	63,205	28,654	5,470	8,752	260,138	6,371	13,726	0
28 U. Southern CA	372,397	49,750	8,448	15,381	76,723	205,018	4,650	9,249	3,178
29 U. NC Chapel Hill	370,806	0	18,616	15,402	10,039	277,423	5,584	43,742	0
30 Yale U.	354,243	9,905	20,731	2,551	6,335	304,345	5,987	4,389	0
Total, 1st 30 institutions	15,051,700	2,188,058	1,217,652	709,680	630,473	9,370,454	192,469	619,434	123,480
31 GA Institute of Technology all campuses	340,347	228,484	23,024	15,590	46,455	10,825	4,524	3,765	7,680
32 U. MD College Park	324,980	75,160	81,315	10,949	34,603	56,410	3,970	62,573	0
33 U. TX Austin	320,966	118,167	73,665	27,396	44,158	39,495	5,350	11,470	1,265
34 IN U. all campuses	299,080	3,243	34,095	4,085	11,133	179,224	10,500	33,908	22,892
35 NC State U.	290,018	76,609	20,267	16,842	15,328	148,461	0	8,604	3,907
36 MI State U.	289,787	23,870	47,401	2,145	7,074	179,521	5,983	23,383	410
37 U. IA	288,808	27,516	18,547	2,178	1,691	227,210	4,521	6,778	367
38 LA State U. all campuses	287,363	42,796	19,668	35,314	4,642	168,782	1,160	9,461	5,540
39 Purdue U. all campuses	285,778	91,370	21,672	4,128	14,369	128,926	4,524	20,095	694
40 U. GA	284,660	8,025	11,145	13,399	7,945	199,155	10,302	34,689	0
Total, 1st 40 institutions	18,063,487	2,883,298	1,568,451	841,706	817,871	10,708,463	243,303	834,160	166,235

See explanatory information and SOURCE at end of table.

TABLE B-39. R&D expenditures at universities and colleges, by science and engineering field: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
41 Northwestern U.	282,154	47,655	23,694	522	3,699	186,653	3,314	12,473	4,144
42 Emory U.	271,238	0	8,673	9	517	255,462	1,663	4,914	0
43 U. MD Baltimore	266,822	0	0	0	0	266,822	0	0	0
44 U. TX Southwestern Medical Ctr. Dallas	263,958	0	0	0	0	263,958	0	0	0
45 U. TX M. D. Anderson Cancer Ctr.	262,145	0	4,936	0	10,347	246,862	0	0	0
46 U. Rochester	261,601	56,192	12,725	752	3,061	175,565	11,737	494	1,075
47 U. IL Chicago	259,852	15,679	12,918	1,480	14,288	186,570	6,273	13,319	9,325
48 Rutgers The State U. NJ all campuses	258,829	35,000	31,423	25,279	14,096	118,490	9,527	23,288	1,726
49 U. AL Birmingham, The	255,053	6,639	2,962	0	676	238,232	5,895	649	0
50 SUNY Buffalo all campuses	239,735	37,954	13,633	961	10,333	168,664	3,964	4,098	128
Total, 1st 50 institutions	20,684,874	3,082,417	1,679,415	870,709	874,888	12,815,741	285,676	893,395	182,633
51 U. KY all campuses	236,275	39,297	7,767	3,053	5,903	156,833	3,400	4,867	15,155
52 VA Polytechnic Institute & State U.	232,560	86,257	12,830	13,525	6,742	101,588	2,461	9,157	0
53 U. Chicago	225,264	219	33,410	4,559	4,607	176,233	3,844	2,392	0
54 NY U.	222,978	0	6,494	729	14,360	177,019	14,629	8,029	1,718
55 CA Institute of Technology	220,004	43,931	107,140	13,131	7,272	37,600	0	1,037	9,893
56 Case Western Reserve U.	219,042	24,133	6,600	433	373	171,688	604	2,396	12,815
57 U. Cincinnati all campuses	217,739	26,701	5,872	360	539	176,777	1,063	3,206	3,221
58 U. UT	216,707	26,349	15,847	5,097	20,878	144,575	2,347	1,614	0
59 U. CA Irvine	209,469	22,888	20,286	6,857	9,793	135,406	4,649	9,472	118
60 Vanderbilt U.	208,305	17,861	10,688	172	948	162,125	5,940	6,704	3,867
Total, 1st 60 institutions	22,893,217	3,370,053	1,906,349	918,625	946,303	14,255,585	324,613	942,269	229,420
61 Wayne State U.	199,007	11,734	16,058	101	1,560	159,013	2,960	6,684	897
62 U. South FL	197,894	19,132	3,555	25,479	393	134,360	11,416	3,559	0
63 Boston U.	192,612	20,875	15,800	3,335	2,998	130,144	6,004	1,461	11,995
64 IA State U.	188,664	45,727	10,218	4,192	12,269	93,870	644	12,834	8,910
65 U. TN system	188,261	34,785	10,403	5,865	9,988	114,256	189	7,048	5,727
66 Carnegie-Mellon U.	188,191	47,609	11,263	861	103,196	7,859	7,016	9,569	818
67 Mt. Sinai School of Medicine	185,335	0	0	0	0	185,335	0	0	0
68 SUNY Stony Brook all campuses	184,045	19,123	27,071	20,744	13,227	96,549	3,851	3,480	0
69 U. VA all campuses	182,340	28,866	14,173	4,441	5,393	123,266	5,070	992	139
70 CO State U.	178,845	37,060	10,549	38,167	3,459	69,291	3,979	4,651	11,689
Total, 1st 70 institutions	24,778,411	3,634,964	2,025,439	1,021,810	1,098,786	15,369,528	365,742	992,547	269,595
71 U. of Medicine and Dentistry NJ	178,156	0	0	0	0	178,156	0	0	0
72 U. MO-Columbia	177,011	19,736	4,468	2,233	1,251	132,161	4,506	12,254	402
73 U. KS all campuses	172,131	19,096	7,768	11,261	2,012	121,057	1,772	6,901	2,264
74 U. CT all campuses	172,003	16,177	7,665	9,780	1,956	119,232	7,375	9,219	599
75 U. NE Lincoln	171,431	26,482	12,230	7,415	6,284	84,711	6,724	11,792	15,793
76 U. Miami	171,319	2,364	2,752	37,275	191	117,760	8,412	2,565	0
77 U. OK all campuses	169,373	16,901	17,763	33,499	3,651	71,181	13,043	13,335	0
78 Rockefeller U.	166,603	0	5,439	0	5,411	155,753	0	0	0
79 Princeton U.	164,408	48,947	28,122	15,508	10,896	29,180	5,404	26,351	0
80 U. HI Manoa	161,823	7,339	22,167	45,908	10,115	58,286	761	3,514	13,733
Total, 1st 80 institutions	26,482,669	3,792,006	2,133,813	1,184,689	1,140,553	16,437,005	413,739	1,078,478	302,386

See explanatory information and SOURCE at end of table.

TABLE B-39. R&D expenditures at universities and colleges, by science and engineering field: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
81 OR State U.	161,735	20,797	4,300	34,844	3,285	94,684	81	2,748	996
82 OR Health Sciences U.	158,729	0e	0e	0e	0e	152,379e	6,350e	0e	0e
83 MS State U.	158,652	54,882	5,284	6,752	3,374	79,575	1,493	4,653	2,639
84 Yeshiva U.	157,124	0	0	0	0	157,124	0	0	0
85 U. NM all campuses	150,598	26,013	8,165	2,017	3,684	72,901	9,373	7,177	21,268
86 U. TX Houston Health Science Ctr.	138,380	0	0	0	0	138,380	0	0	0
87 Clemson U.	134,840	52,744	8,333	34	3,762	50,676	493	7,001	11,797
88 FL State U.	134,351	15,500	49,388	19,232	5,884	15,637	6,579	22,103	28
89 U. MA Worcester	132,729	0	0	0	0	132,729	0	0	0
90 Medical U. SC	132,030	0	0	0	0	132,030	0	0	0
Total, 1st 90 institutions	27,941,837	3,961,942	2,209,283	1,247,568	1,160,542	17,463,120	438,108	1,122,160	339,114
91 U. CA Santa Barbara	131,795	44,475	25,959	22,840	12,748	4,290	7,077	12,285	2,121
92 U. TX Health Science Ctr. San Antonio	129,616	0	0	0	0	129,616	0	0	0
93 U. TX Medical Branch Galveston	129,534	2,346	0	0	0	127,188	0	0	0
94 Dartmouth C.	126,839	18,326	3,979	1,067	5,343	86,943	5,868	670	4,643
95 U. SC all campuses	123,108	28,314	24,054	20,297	2,318	33,200	3,102	9,757	2,066
96 AZ State U. main campus	123,016	47,861	17,772	10,379	6,567	18,086	6,308	10,083	5,960
97 UT State U.	121,621	55,524	4,344	9,804	1,557	37,392	2,298	3,599	7,103
98 U. AK Fairbanks all campuses	116,279	8,094	1,405	71,747	9,040	22,224	0	1,924	1,845
99 WA State U.	112,469	18,114	6,452	4,840	561	70,907	261	10,326	1,008
100 U. CA Riverside	111,936	14,806	7,524	12,273	2,712	59,043	1,737	9,886	3,955
Total, 1st 100 institutions	29,168,050	4,199,802	2,300,772	1,400,815	1,201,388	18,052,009	464,759	1,180,690	367,815
101 Wake Forest U.	111,634	0	1,808	0	224	108,994	0	0	608
102 VA Commonwealth U.	109,619	3,749	5,064	348	292	95,536	3,214	1,416	0
103 Brown U.	109,482	14,836	9,427	5,683	13,762	56,523	3,028	6,223	0
104 U. MA Amherst	109,332	21,224	26,779	4,550	17,415	30,158	5,144	2,899	1,163
105 Tufts U.	109,291	7,334	2,964	1,020	1,284	84,507	4,133	8,049	0
106 Auburn U. all campuses	108,775	32,315	3,625	827	522	65,769	237	2,398	3,082
107 KS State U.	106,804	16,488	11,131	509	2,596	68,452	1,245	3,952	2,431
108 NM State U. all campuses	103,078	61,590	10,224	2,442	1,964	23,139	1,626	1,488	605
109 Tulane U.	102,998	7,181	2,515	1,237	1,742	85,598	383	4,251	91
110 Thomas Jefferson U.	102,974	0	0	0	0	102,974	0	0	0
Total, 1st 110 institutions	30,242,037	4,364,519	2,374,309	1,417,431	1,241,189	18,773,659	483,769	1,211,366	375,795
111 Woods Hole Oceanographic Institution	99,964	22,404	0	77,560	0	0	0	0	0
112 Medical C. WI	96,700	0	0	0	0	96,700	0	0	0
113 Georgetown U.	96,450	0	5,172	0	353	87,245	417	3,263	0
114 OK State U. all campuses	94,987	18,295	5,930	1,831	1,067	54,332	495	11,652	1,385
115 U. NH	93,222	17,062	3,077	38,664	672	24,591	950	4,541	3,665
116 U. VT	88,602	2,072	1,505	472	1,155	79,952	974	154	2,318
117 George Washington U.	86,288	13,763	2,719	182	17,434	42,278	1,065	7,587	1,260
118 U. DE	85,157	31,312	13,042	10,293	2,936	20,921	1,230	5,423	0
119 WV U.	84,985	22,563	4,308	5,777	448	48,372	324	1,388	1,805
120 U. AR main campus	83,063	11,613	11,336	2,881	1,144	52,830	409	2,850	0
Total, 1st 120 institutions	31,151,455	4,503,603	2,421,398	1,555,091	1,266,398	19,280,880	489,633	1,248,224	386,228

See explanatory information and SOURCE at end of table.

TABLE B-39. R&D expenditures at universities and colleges, by science and engineering field: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
121 TX Tech U.	82,785	18,477	8,644	10,489	1,985	36,628	222	5,738	602
122 U. Louisville	80,974	7,485	1,774	409	324	64,124	2,405	3,830	623
123 Rush U.	79,394	0	0	0	0	77,581	1,813	0	0
124 MT State U.-Bozeman	78,211	9,921	12,798	824	306	47,193	0	2,761	4,408
125 U. ID	76,758	12,224	2,420	3,944	1,502	50,861	200	3,301	2,306
126 ND State U. all campuses	72,105	2,634	5,292	249	1,211	51,677	665	7,538	2,839
127 U. NE Medical Ctr.	71,000	0	0	0	0	71,000	0	0	0
128 U. CA Santa Cruz	70,967	3,555	31,335	15,367	3,797	12,066	1,034	3,663	150
129 U. MS all campuses	67,838 i	6,628	15,159	0	498	36,246 i	145	3,937	5,225
130 SUNY Albany	67,493	10,149	2,257	5,693	1,495	35,182	1,885	10,832	0
Total, 1st 130 institutions	31,898,980	4,574,676	2,501,077	1,592,066	1,277,516	19,763,438	498,002	1,289,824	402,381
131 U. NV, Reno	66,721	9,650	5,369	6,909	956	34,621	813	1,672	6,731
132 U. Central FL	66,351	9,972	15,645	9,238	400	5,814	1,902	6,006	17,374
133 San Diego State U.	64,302	8,430	3,660	4,646	2,919	24,271	7,975	5,655	6,746
134 Temple U.	63,850	2,801	7,033	186	881	39,678	10,482	2,789	0
135 U. ME	62,149	13,041	4,190	18,952	1,947	19,654	550	3,746	69
136 NJ Institute of Technology	61,424	33,393	5,434	2,224	7,122	0	0	248	13,003
137 U. Houston	59,707	22,111	6,260	1,192	6,148	11,957	8,457	3,582	0
138 Southern IL U. Carbondale	53,604	9,236	1,530	1,507	522	34,114	481	2,831	3,383
139 U. RI	53,347	5,341	606	23,869	170	12,207	5,391	462	5,301
140 U. of Notre Dame	52,371	13,388	17,792	0	1,843	9,289	2,177	2,235	5,647
Total, 1st 140 institutions	32,502,806	4,702,039	2,568,596	1,660,789	1,300,424	19,955,043	536,230	1,319,050	460,635
141 Medical C. GA	51,705	0	0	0	0	51,705	0	0	0
142 TX A&M U. System Health Science Ctr.	49,636	392	0	135	0	49,014	95	0	0
143 Charles R. Drew U. of Medicine & Science	48,839	0	0	0	0	48,839	0	0	0
144 U. AL Huntsville, The	48,353	20,999	12,474	7,003	5,239	2,189	22	147	280
145 Rice U.	48,169	11,401	14,885	1,112	12,258	6,768	877	868	0
146 U. LA Lafayette	47,796	3,931	692	289	6,243	30,367	159	907	5,208
147 FL International U.	47,654	17,366	3,660	3,883	2,799	4,981	584	8,926	5,455
148 Brandeis U.	47,122	0	5,230	0	2,090	21,187	1,882	16,733	0
149 U. Dayton	46,554	44,387	1,219	199	97	407	245	0	0
150 Rensselaer Polytechnic Institute	45,955	34,241	5,332	2,306	3,297	779	0	0	0
Total, 1st 150 institutions	32,984,589	4,834,756	2,612,088	1,675,716	1,332,447	20,171,279	540,094	1,346,631	471,578
151 Syracuse U. all campuses	45,870	10,485	4,863	1,116	7,172	2,961	1,978	4,212	13,083
152 Naval Postgraduate School	45,227 i	12,031 i	2,849 i	10,899 i	9,404 i	0 i	0 i	6,196 i	3,848 i
153 U. AR for Medical Sciences	45,046	0	0	0	0	45,046	0	0	0
154 GA State U.	44,564	0	4,901	505	2,572	17,258	9,009	10,319	0
155 Drexel U.	44,465	37,966	2,484	138	3,152	720	0	5	0
156 U. OR	43,723	176	8,693	1,578	2,643	18,947	8,848	2,838	0
157 U. WY	41,632e	3,644e	3,069e	6,483e	535e	19,715e	771e	1,572e	5,843e
158 C. of William and Mary all campuses	39,858	0	7,603	26,493	1,366	2,394	430	1,572	0
159 U. MT, The	39,367	0	1,779	560	903	26,908	155	4,685	4,377
160 George Mason U.	38,849	9,118	379	6,479	6,098	6,278	2,143	8,354	0
Total, 1st 160 institutions	33,413,190	4,908,176	2,648,708	1,729,967	1,366,292	20,311,506	563,428	1,386,384	498,729

See explanatory information and SOURCE at end of table.

TABLE B-39. R&D expenditures at universities and colleges, by science and engineering field: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
161 Northeastern U.	38,540	14,811	8,969	13	2,372	7,788	1,969	2,618	0
162 U. MD Ctr. for Environmental Science	38,501	0	0	38,501	0	0	0	0	0
163 MCP Hahnemann U.	37,945	0	0	0	0	37,323	622	0	0
164 Loyola U. (Chicago, IL)	37,607	0	1,901	26	137	33,352	1,168	1,023	0
165 U. AL, The	37,130	19,321	5,165	1,896	1,669	3,067	2,226	3,142	644
166 OH U. all campuses	36,601	18,248	5,543	1,169	118	7,717	1,759	1,087	960
167 U. MD Baltimore County	36,323	7,195	6,134	15,336	1,334	3,099	1,190	2,035	0
168 NM Institute of Mining and Technology	36,309	16,674	2,792	9,004	86	3,104	36	0	4,613
169 St. Louis U. all campuses	35,444	18	51	691	260	34,241	71	1	111
170 Howard U.	35,387	3,347	2,160	1	2,757	24,138	2,553	427	4
Total, 1st 170 institutions	33,782,977	4,987,790	2,681,423	1,796,604	1,375,025	20,465,335	575,022	1,396,717	505,061
171 SUNY Health Science Ctr. Brooklyn	34,981 i	0 i	0 i	0 i	0 i	34,981 i	0 i	0 i	0 i
172 U. MD Biotechnology Institute	34,440	0	0	8,558	0	25,882	0	0	0
173 U. ND all campuses	33,973	17,290	1,034	3,323	233	10,120	19	73	1,881
174 U. Memphis, The	33,625	3,611	1,411	4,340	1,602	4,018	11,084	6,370	1,189
175 U. MO-Rolla	32,222	25,806	3,852	2,072	146	342	3	1	0
176 Boston C.	31,754	0	8,421	687	13,743	3,450	580	4,873	0
177 FL A&M U.	31,147	2,777	1,475	441	0	10,940	2	49	15,463
178 Wright State U. all campuses	30,962	4,634	2,011	424	3,932	18,170	1,327	340	124
179 U. NV, Las Vegas	30,527	4,899 i	4,180 i	14,920 i	1,224 i	3,311 i	162 i	1,829 i	2 i
180 MI Technological U.	30,005	19,625	1,551	1,048	1,169	5,893	0	321	398
Total, 1st 180 institutions	34,106,613	5,066,432	2,705,358	1,832,417	1,397,074	20,582,442	588,199	1,410,573	524,118
181 Desert Research Institute	29,465	0	0	22,123	0	0	0	0	7,342
182 Old Dominion U.	29,223	15,547	2,304	3,847	1,631	3,347	1,399	1,148	0
183 U. PR Medical Sciences Campus	29,089	0	0	0	0	29,089	0	0	0
184 Uniformed Services U. of the Health Sciences	28,630	0	0	0	0	28,630	0	0	0
185 Eastern VA Medical School	28,572	0	0	0	0	28,572	0	0	0
186 U. Akron all campuses	28,080	8,100	10,236	574	597	1,365	110	7,098	0
187 CO School of Mines	26,515	17,672	6,789	1,283	597	0	0	174	0
188 SUNY C. of Environmental Science & Forestry	26,337	9,078 i	2,101 i	2,603 i	0 i	12,292 i	0 i	263 i	0 i
189 U. TX Dallas	26,198	5,587	4,785	3,801	3,070	6,029	153	929	1,844
190 CUNY Hunter C.	25,905	0	5,671	3,697	247	9,870	4,141	2,107	172
Total, 1st 190 institutions	34,384,627	5,122,416	2,737,244	1,870,345	1,403,216	20,701,636	594,002	1,422,292	533,476

See explanatory information and SOURCE at end of table.

TABLE B-39. R&D expenditures at universities and colleges, by science and engineering field: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
191 U. Southern MS	25,685	1,544	6,824	10,964	1,419	2,100	357	0	2,477
192 U.S. Air Force Academy	25,589	17,901	3,259	0	657	887	2,024	861	0
193 Jackson State U.	25,445	242	3,238	3,521	5,229	5,823	1,743	607	5,042
194 NY Medical C.	25,222	0	0	0	0	25,222	0	0	0
195 San Jose State U.	25,003	2,702	3,142	9,517	1,478	462	6,530	95	1,077
196 U. WI Milwaukee	24,933	4,296	4,988	4,008	1,680	2,509	481	6,960	11
197 U. Toledo	24,825	12,463	5,418	2,228	31	3,619	206	518	342
198 U. MO-Kansas City	24,060	312	1,176	371	788	19,453	1,336	624	0
199 Loma Linda U.	23,996	0	0	0	0	19,545	0	1	4,450
200 FL Atlantic U.	23,995	8,401	1,674	572	2,196	6,546	1,691	2,288	627
Total, 1st 200 institutions	34,633,380	5,170,277	2,766,963	1,901,526	1,416,694	20,787,802	608,370	1,434,246	547,502
Total, all other sampled institutions	1,699,261	333,950	241,503	120,897	95,821	616,370	62,252	148,642	79,826

[1] Johns Hopkins University includes the Applied Physics Laboratory.

e = estimated.
i = imputed.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-40. Federally financed R&D expenditures at universities and colleges, by science and engineering field: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
Total, all institutions	21,833,953	3,217,302	2,124,143	1,293,610	1,036,549	12,852,020	474,374	616,163	219,792
1 Johns Hopkins U., The [1]	1,022,510	342,355	114,292	34,678	95,138	406,785	3,250	6,905	19,107
2 U. WA	487,059	41,652	20,100	61,985	10,371	341,857	7,485	3,609	0
3 U. MI all campuses	444,255	102,897	21,585	3,057	5,796	240,123	8,317	62,450	30
4 Stanford U.	426,620	104,501	56,406	5,881	17,687	235,353	3,672	3,120	0
5 U. PA	397,587	14,712	21,498	38	11,258	332,825	2,982	11,846	2,428
6 U. CA Los Angeles	366,762	32,827	33,954	8,520	10,708	266,260	7,211	5,679	1,603
7 U. CA San Diego	359,383	30,383	28,434	72,667	40,131	178,800	5,258	3,710	0
8 Columbia U. in the City of New York	356,749	15,685	31,122	49,623	8,703	242,713	2,951	5,283	669
9 U. WI Madison	345,003	58,900	32,913	23,315	10,179	183,930	18,587	17,179	0
10 U. CO all campuses	340,466	25,869	52,783	56,117	6,209	181,759	7,206	9,832	691
Total, 1st 10 institutions	4,546,394	769,781	413,087	315,881	216,180	2,610,405	66,919	129,613	24,528
11 Harvard U.	336,607	6,006	32,752	14,202	4,270	261,863	5,901	11,613	0
12 MA Institute of Technology	330,409	117,369	96,224	18,713	28,480	58,047	606	1,420	9,550
13 U. CA San Francisco	327,393	0	20,915	0	0	306,478	0	0	0
14 U. Pittsburgh all campuses	306,913	9,572	12,023	365	3,459	270,083	5,451	5,960	0
15 Washington U. St. Louis	303,441	5,427	9,951	2,588	5,358	273,418	2,215	4,484	0
16 U. MN all campuses	295,301	28,807	18,529	5,501	11,441	220,412	6,717	3,894	0
17 PA State U. all campuses	284,706	121,950	39,869	15,160	7,409	82,591	7,581	9,289	857
18 Yale U.	274,304	6,750	17,511	2,236	5,102	238,151	3,735	819	0
19 Cornell U. all campuses	270,578	33,943	44,674	2,797	16,738	163,939	2,302	6,185	0
20 U. Southern CA	266,645	37,253	5,870	11,194	71,044	134,335	3,625	2,983	341
Total, 1st 20 institutions	7,542,691	1,136,858	711,405	388,637	369,481	4,619,722	105,052	176,260	35,276
21 Duke U.	261,356	13,893	13,054	5,263	5,509	207,083	2,943	13,611	0
22 Baylor C. of Medicine	259,475	0	0	0	0	259,475	0	0	0
23 U. NC Chapel Hill	254,571	0	13,325	8,753	7,898	190,527	4,669	29,399	0
24 U. TX Austin	219,158	79,322	52,700	10,406	37,405	27,544	4,748	6,103	930
25 U. CA Berkeley	217,297	55,003	54,879	3,561	6,366	85,063	6,310	4,999	1,116
26 U. AL Birmingham, The	216,221	4,484	2,093	0	551	203,111	5,374	608	0
27 U. IL Urbana-Champaign	214,323	61,868	30,780	10,021	54,140	45,822	5,483	4,344	1,865
28 U. AZ	211,772	26,066	42,685	6,211	7,751	118,710	2,131	8,218	0
29 CA Institute of Technology	199,944	40,636	102,970	11,207	7,062	35,134	0	982	1,953
30 U. Rochester	195,298	47,238	11,199	639	2,790	125,388	7,591	453	0
Total, 1st 30 institutions	9,792,106	1,465,368	1,035,090	444,698	498,953	5,917,579	144,301	244,977	41,140
31 U. MD College Park	194,095	45,416	57,640	8,112	21,309	26,381	3,019	32,218	0
32 Emory U.	186,083	0	5,365	4	390	178,546	1,160	618	0
33 U. Chicago	183,830	193	27,553	4,391	4,481	141,164	3,813	2,235	0
34 Case Western Reserve U.	181,888	18,266	6,022	372	272	154,729	530	1,697	0
35 U. IA	180,743	10,927	14,509	1,036	1,192	147,461	3,897	1,708	13
36 Northwestern U.	178,607	33,972	15,577	490	3,004	117,218	2,800	4,270	1,276
37 OH State U. all campuses	177,883	27,430	15,518	4,764	3,762	109,006	5,353	11,543	507
38 U. CA Davis	176,644	16,988	13,923	14,139	2,767	123,169	533	4,086	1,039
39 Vanderbilt U.	172,858	14,125	9,158	152	923	138,209	4,655	4,900	736
40 Boston U.	171,438	19,165	14,626	2,824	2,753	113,936	5,823	1,148	11,163
Total, 1st 40 institutions	11,596,175	1,651,850	1,214,981	480,982	539,806	7,167,398	175,884	309,400	55,874

See explanatory information and SOURCE at end of table.

TABLE B-40. Federally financed R&D expenditures at universities and colleges, by science and engineering field: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
41 U. FL	167,108	31,209	17,554	2,732	5,895	101,313	4,945	3,460	0
42 GA Institute of Technology all campuses	165,680	111,226	11,207	7,589	22,615	5,270	2,202	1,833	3,738
43 TX A&M U. all campuses	163,488	36,311	14,199	56,223	10,014	42,784	2,420	1,529	8
44 U. TX Southwestern Medical Ctr. Dallas	155,258	0	0	0	0	155,258	0	0	0
45 U. VA all campuses	152,358	22,125	12,595	4,081	4,807	103,220	4,467	927	136
46 U. Cincinnati all campuses	150,166	12,886	2,446	102	84	133,431	99	1,100	18
47 NY U.	149,995	0	5,822	0	11,663	114,924	12,247	5,015	324
48 U. IL Chicago	143,183	6,043	7,768	537	10,355	107,963	4,014	5,105	1,398
49 U. UT	142,625	14,514	11,745	3,548	14,888	95,799	1,809	322	0
50 Carnegie-Mellon U.	137,967	26,301	8,627	2	84,155	6,713	6,295	5,473	401
Total, 1st 50 institutions	13,124,003	1,912,465	1,306,944	555,796	704,282	8,034,073	214,382	334,164	61,897
51 IN U. all campuses	132,759	468	17,371	1,243	3,615	96,579	6,762	6,643	78
52 OR Health Sciences U.	130,231	0e	0e	0e	0e	123,979e	6,252e	0e	0e
53 SUNY Buffalo all campuses	128,842	24,418	7,497	574	3,752	89,183	2,006	1,412	0
54 Mt. Sinai School of Medicine	125,979	0	0	0	0	125,979	0	0	0
55 MI State U.	122,595	7,866	27,149	392	4,092	69,114	3,940	10,042	0
56 U. Miami	121,171	1,492	2,727	33,285	191	72,837	8,213	2,426	0
57 U. TX M. D. Anderson Cancer Ctr.	117,633	0	3,452	0	3,882	110,299	0	0	0
58 U. MD Baltimore	117,017	0	0	0	0	117,017	0	0	0
59 U. CA Irvine	115,548	8,227	14,134	2,979	5,131	78,246	3,661	3,170	0
60 Yeshiva U.	114,268	0	0	0	0	114,268	0	0	0
Total, 1st 60 institutions	14,350,046	1,954,936	1,379,274	594,269	724,945	9,031,574	245,216	357,857	61,975
61 CO State U.	112,650	23,217	7,483	27,743	2,336	38,463	2,885	2,798	7,725
62 U. HI Manoa	110,882	4,939	16,740	28,555	10,073	38,014	646	1,844	10,071
63 SUNY Stony Brook all campuses	108,122	9,177	17,782	12,531	6,929	57,809	2,788	1,106	0
64 Purdue U. all campuses	107,477	29,770	14,492	2,681	6,395	48,077	2,598	3,403	61
65 U. NM all campuses	104,252	19,546	7,285	1,674	3,355	50,121	7,790	2,699	11,782
66 U. KY all campuses	100,426	15,662	4,418	1,454	2,752	66,199	2,887	2,073	4,981
67 U. TX Houston Health Science Ctr.	98,676	0	0	0	0	98,676	0	0	0
68 LA State U. all campuses	97,928	15,146	12,330	12,047	888	55,052	524	1,941	0
69 Princeton U.	97,724	30,525	20,523	9,857	7,222	21,380	3,944	4,273	0
70 Wayne State U.	95,910	5,362	8,511	34	995	77,350	1,821	1,837	0
Total, 1st 70 institutions	15,384,093	2,108,280	1,488,838	690,845	765,890	9,582,715	271,099	379,831	96,595
71 U. MA Worcester	93,992	0	0	0	0	93,992	0	0	0
72 U. CT all campuses	93,326	7,439	4,529	6,181	1,217	64,292	5,783	3,885	0
73 Wake Forest U.	91,738	0	1,330	0	224	90,127	0	0	57
74 OR State U.	91,683	13,871	3,448	29,777	2,625	40,042	0	955	965
75 Rutgers The State U. NJ all campuses	91,205	14,113	16,334	11,484	5,055	37,573	4,003	2,643	0
76 U. of Medicine and Dentistry NJ	90,235	0	0	0	0	90,235	0	0	0
77 U. TN system	88,344	13,752	7,991	3,570	5,463	55,777	157	1,457	177
78 Dartmouth C.	87,255	13,636	2,887	764	4,275	60,892	4,173	452	176
79 Georgetown U.	87,087	0	4,091	0	353	79,374	398	2,871	0
80 U. South FL	84,108	8,110	1,063	16,759	174	52,194	4,689	1,119	0
Total, 1st 80 institutions	16,283,066	2,179,201	1,530,511	759,380	785,276	10,247,213	290,302	393,213	97,970

See explanatory information and SOURCE at end of table.

TABLE B-40. Federally financed R&D expenditures at universities and colleges, by science and engineering field: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
81 U. TX Health Science Ctr. San Antonio	83,761	0	0	0	0	83,761	0	0	0
82 VA Polytechnic Institute & State U.	82,976	34,702	6,545	10,984	3,102	23,715	1,502	2,426	0
83 U. KS all campuses	82,663	8,331	4,970	2,526	565	60,391	1,467	2,979	1,434
84 UT State U.	79,393	50,264	3,641	2,895	1,101	18,448	1,223	1,542	279
85 Thomas Jefferson U.	79,217	0	0	0	0	79,217	0	0	0
86 Woods Hole Oceanographic Institution	78,458	14,697	0	63,761	0	0	0	0	0
87 U. CA Santa Barbara	78,370	24,933	19,037	11,565	8,697	3,179	4,797	5,752	410
88 U. TX Medical Branch Galveston	78,100	1,007	0	0	0	77,093	0	0	0
89 U. GA	78,086	1,225	3,875	4,789	1,532	59,143	5,093	2,429	0
90 U. MO-Columbia	77,742	7,127	2,492	1,031	910	59,480	2,700	4,002	0
Total, 1st 90 institutions	17,081,832	2,321,487	1,571,071	856,931	801,183	10,711,640	307,084	412,343	100,093
91 MS State U.	77,521	39,986	1,768	5,795	1,270	24,262	751	2,248	1,441
92 Medical C. WI	76,241	0	0	0	0	76,241	0	0	0
93 Medical U. SC	75,803	0	0	0	0	75,803	0	0	0
94 NC State U.	75,204	23,963	7,077	4,375	5,754	31,918	0	1,715	402
95 Tufts U.	73,236	4,634	2,338	175	1,126	62,033	1,725	1,205	0
96 IA State U.	71,419	19,022	5,754	2,332	4,800	31,898	54	7,060	499
97 FL State U.	70,456	11,082	24,809	11,698	3,477	8,031	3,065	8,294	0
98 NM State U. all campuses	70,314	45,636	8,846	1,688	1,475	9,898	1,417	1,023	331
99 U. OK all campuses	69,388	5,058	9,501	12,890	328	33,659	4,398	3,554	0
100 Brown U.	68,215	8,957	5,126	3,601	9,123	37,427	2,216	1,765	0
Total, 1st 100 institutions	17,809,629	2,479,825	1,636,290	899,485	828,536	11,102,810	320,710	439,207	102,766
101 Rockefeller U.	67,559	0	3,146	0	1,688	62,725	0	0	0
102 U. AK Fairbanks all campuses	66,169	4,161	487	43,983	0	14,959	0	1,319	1,260
103 VA Commonwealth U.	65,028	2,310	3,063	138	223	56,343	2,259	692	0
104 Tulane U.	64,824	4,362	1,459	559	1,494	53,127	134	3,689	0
105 AZ State U. main campus	64,407	21,707	8,831	9,935	4,306	10,589	4,996	2,035	2,008
106 George Washington U.	58,729	10,790	2,177	171	15,717	25,815	834	2,931	294
107 U. VT	58,280	1,058	1,087	347	613	53,274	460	51	1,390
108 WA State U.	56,360	11,037	4,690	4,022	545	32,076	172	3,362	456
109 U. MA Amherst	54,770	7,766	14,493	1,860	10,457	15,946	3,555	693	0
110 U. SC all campuses	53,403	15,098	9,103	7,095	1,266	14,948	2,064	3,410	419
Total, 1st 110 institutions	18,419,158	2,558,114	1,684,826	967,595	864,845	11,442,612	335,184	457,389	108,593
111 U. NE Lincoln	51,405	6,072	7,432	2,796	3,243	23,933	3,840	2,666	1,423
112 U. NH	50,829	7,667	2,366	28,454	459	8,390	797	2,696	0
113 U. MS all campuses	50,092 i	5,602	13,259	0	344	23,377 i	130	3,704	3,676
114 WV U.	49,394	17,298	3,450	4,025	325	22,211	205	697	1,183
115 U. DE	48,183	18,344	8,939	6,769	1,464	7,945	954	3,768	0
116 Clemson U.	47,174	24,531	4,629	25	794	14,802	370	2,022	1
117 U. RI	45,453	4,328	498	22,849	142	9,568	4,843	454	2,771
118 Rush U.	44,756	0	0	0	0	43,387	1,369	0	0
119 Temple U.	44,577	1,889	6,285	152	798	27,561	7,143	749	0
120 Naval Postgraduate School	44,379 i	11,804 i	2,796 i	10,695 i	9,228 i	0 i	0 i	6,080 i	3,776 i
Total, 1st 120 institutions	18,895,400	2,655,649	1,734,480	1,043,360	881,642	11,623,786	354,835	480,225	121,423

See explanatory information and SOURCE at end of table.

TABLE B-40. Federally financed R&D expenditures at universities and colleges, by science and engineering field: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
121 KS State U.	43,988	6,708	9,489	251	1,856	22,875	889	1,177	743
122 Auburn U. all campuses	42,432	16,464	2,819	382	115	18,519	192	1,334	2,607
123 SUNY Albany	40,497	0	923	2,961	1,199	30,396	867	4,151	0
124 U. Dayton	40,191	38,490	1,176	192	43	290	0	0	0
125 MT State U.-Bozeman	39,986	5,675	9,776	521	250	19,161	0	1,472	3,131
126 U. NV, Reno	39,958	7,791	4,997	4,476	924	20,390	687	692	1
127 Rice U.	39,739	8,522	12,398	930	10,872	5,487	831	699	0
128 Charles R. Drew U. of Medicine & Science	39,259	0	0	0	0	39,259	0	0	0
129 U. Louisville	38,978	3,582	1,195	194	185	30,070	1,867	1,539	346
130 U. OR	37,177	23	7,214	1,416	2,597	15,678	8,505	1,744	0
Total, 1st 130 institutions	19,297,605	2,742,904	1,784,467	1,054,683	899,683	11,825,911	368,673	493,033	128,251
131 U. AL Huntsville, The	35,660	15,157	9,413	5,166	4,451	1,320	18	14	121
132 Howard U.	33,949	3,125	1,987	1	2,586	23,343	2,553	351	3
133 U. ID	33,465	7,873	1,298	2,152	1,259	18,866	89	1,102	826
134 U. of Notre Dame	33,285	7,630	14,777	0	1,640	6,780	1,809	617	32
135 U. CA Santa Cruz	32,901	2,090	12,816	7,613	2,666	6,359	614	727	16
136 Syracuse U. all campuses	32,704	7,191	4,528	952	3,400	2,577	1,952	2,396	9,708
137 U. CA Riverside	32,305	3,863	5,467	3,401	1,865	13,784	1,545	2,375	5
138 FL International U.	32,057	11,682	2,461	2,612	1,883	3,352	393	6,004	3,670
139 George Mason U.	31,890	8,415	228	6,429	5,974	4,391	1,967	4,486	0
140 U. Houston	31,455	8,688	3,190	506	3,280	8,648	6,205	938	0
Total, 1st 140 institutions	19,627,276	2,818,618	1,840,632	1,083,515	928,687	11,915,331	385,818	512,043	142,632
141 St. Louis U. all campuses	31,215	0	51	642	260	30,220	42	0	0
142 OK State U. all campuses	31,100	7,681	2,979	628	390	13,150	88	5,389	795
143 Drexel U.	30,232	25,493	2,009	12	2,146	572	0	0	0
144 U. Central FL	29,929	5,194	7,160	3,543	325	3,966	1,756	3,276	4,709
145 U. MD Baltimore County	29,376	4,275	5,129	14,247	1,060	2,796	826	1,043	0
146 Brandeis U.	29,006	0	4,004	0	1,741	15,482	1,506	6,273	0
147 U. NE Medical Ctr.	28,602	0	0	0	0	28,602	0	0	0
148 TX Tech U.	28,202	6,101	2,703	6,857	797	11,254	153	337	0
149 Loyola U. (Chicago, IL)	27,678	0	1,532	19	137	24,788	988	214	0
150 U. AR main campus	27,588	4,438	8,081	1,129	148	13,170	87	535	0
Total, 1st 150 institutions	19,920,204	2,871,800	1,874,280	1,110,592	935,691	12,059,331	391,264	529,110	148,136
151 U. AR for Medical Sciences	27,491	0	0	0	0	27,491	0	0	0
152 U. AL, The	26,900	14,801	3,276	1,414	1,040	2,220	2,203	1,607	339
153 MCP Hahnemann U.	26,619	0	0	0	0	26,247	372	0	0
154 Rensselaer Polytechnic Institute	26,490	18,944	3,375	1,530	2,121	520	0	0	0
155 NJ Institute of Technology	25,641	15,422	3,439	1,537	2,515	0	0	5	2,723
156 SUNY Health Science Ctr. Brooklyn	25,495 i	0 i	0 i	0 i	0 i	25,495 i	0 i	0 i	0 i
157 San Diego State U.	25,223	2,860	1,570	1,972	1,362	13,317	3,826	273	43
158 U. ND all campuses	25,004	12,547	589	2,877	197	8,407	6	5	376
159 Northeastern U.	24,295	9,323	6,089	13	1,885	5,173	1,290	522	0
160 U. PR Medical Sciences Campus	23,931	0	0	0	0	23,931	0	0	0
Total, 1st 160 institutions	20,177,293	2,945,697	1,892,618	1,119,935	944,811	12,192,132	398,961	531,522	151,617

See explanatory information and SOURCE at end of table.

TABLE B-40. Federally financed R&D expenditures at universities and colleges, by science and engineering field: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
161 U. ME	23,732	4,064	2,084	9,340	529	6,007	476	1,232	0
162 Medical C. GA	23,317	0	0	0	0	23,317	0	0	0
163 Boston C.	22,827	0	6,743	602	9,719	2,193	442	3,128	0
164 Desert Research Institute	22,760	0	0	16,553	0	0	0	0	6,207
165 U. MT, The	22,612	0	1,180	408	561	17,789	145	2,529	0
166 TX A&M U. System Health Science Ctr.	22,417	83	0	135	0	22,104	95	0	0
167 U. Southern MS	22,398	1,445	4,915	10,184	1,419	1,957	109	0	2,369
168 U. NV, Las Vegas	22,367	3,009 i	1,850 i	13,095 i	1,217 i	2,669 i	0 i	527 i	0 i
169 Morehouse School of Medicine	21,919	0	0	0	0	21,919	0	0	0
170 Jackson State U.	21,721	207	2,764	3,006	4,463	4,971	1,488	518	4,304
Total, 1st 170 institutions	20,403,363	2,954,505	1,912,154	1,173,258	962,719	12,295,058	401,716	539,456	164,497
171 FL A&M U.	21,592	1,864	1,319	377	0	8,515	2	11	9,504
172 ND State U. all campuses	21,414	1,654	4,168	135	859	7,692	509	4,878	1,519
173 Meharry Medical C.	20,453	0	0	0	0	20,453	0	0	0
174 Loma Linda U.	20,114	0	0	0	0	17,011	0	0	3,103
175 U. WY	20,017e	2,201e	2,180e	3,984e	397e	8,870e	602e	684e	1,099e
176 NY Medical C.	19,318	0	0	0	0	19,318	0	0	0
177 GA State U.	18,967	0	2,264	173	772	7,260	5,992	2,506	0
178 NM Institute of Mining and Technology	18,864	7,286	1,576	3,316	0	2,751	35	0	3,900
179 C. of William and Mary all campuses	18,007	0	5,458	9,630	1,160	1,279	169	311	0
180 MI Technological U.	17,973	11,640	1,165	873	969	3,174	0	152	0
Total, 1st 180 institutions	20,600,082	2,979,150	1,930,284	1,191,746	966,876	12,391,381	409,025	547,998	183,622
181 Catholic U. America	17,925	1,169	15,129	0	0	677	917	22	11
182 OH U. all campuses	17,677	9,435	3,467	304	49	2,453	1,102	536	331
183 Old Dominion U.	17,170	9,884	1,420	2,703	994	753	1,108	308	0
184 U. TX El Paso	16,457	5,118	2,025	4,693	747	3,215	424	235	0
185 Wright State U. all campuses	16,070	1,873	1,348	166	1,501	10,321	854	1	6
186 U. South AL	15,922	455	149	805	318	13,567	189	439	0
187 San Jose State U.	15,777	1,459	1,976	4,996	423	375	6,527	15	6
188 U. MO-Rolla	15,749	12,830	2,137	550	44	188	0	0	0
189 FL Atlantic U.	15,566	6,375	838	113	1,044	4,167	1,536	1,027	466
190 Clark Atlanta U.	15,325	2,318	3,101	0	896	2,968	0	568	5,474
Total, 1st 190 institutions	20,763,720	3,030,066	1,961,874	1,206,076	972,892	12,430,065	421,682	551,149	189,916
191 U. MA Lowell	14,932	3,779	5,343	1,373	107	1,850	1,508	965	7
192 CUNY Hunter C.	14,573	0	4,101	244	40	6,487	3,205	421	75
193 U. Memphis, The	14,072	952	504	1,144	1,222	1,006	5,661	3,583	0
194 Lehigh U.	13,519	9,223	2,434	855	65	900	38	4	0
195 SUNY Upstate Medical U.	13,404	0	0	0	0	13,404	0	0	0

See explanatory information and SOURCE at end of table.

TABLE B-40. Federally financed R&D expenditures at universities and colleges, by science and engineering field: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
196 CUNY City C.	13,319	1,503	5,245	439	1,065	4,381	562	124	0
197 CO School of Mines	13,230	6,092	5,816	625	529	0	0	168	0
198 U. MD Ctr. for Environmental Science	13,080	0	0	13,080	0	0	0	0	0
199 Eastern VA Medical School	13,077	0	0	0	0	13,077	0	0	0
200 U. LA Lafayette	12,925	651	10	235	960	9,019	0	99	1,951
Total, 1st 200 institutions	20,899,851	3,052,266	1,985,327	1,224,071	976,880	12,480,189	432,656	556,513	191,949
Total, all other sampled institutions	934,102	165,036	138,816	69,539	59,669	371,831	41,718	59,650	27,843

[1] Johns Hopkins University includes the Applied Physics Laboratory.

e = estimated.
i = imputed.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-41. Non-Federal R&D expenditures at universities and colleges, by science and engineering field: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
Total, all institutions	14,498,688	2,286,925	884,323	728,813	475,966	8,552,152	196,248	966,725	407,536
1 U. CA Los Angeles	420,836	18,544	34,257	6,304	4,612	307,639	3,977	37,292	8,211
2 U. WI Madison	317,098	30,783	17,536	10,905	5,495	226,370	6,156	19,803	50
3 U. CA Davis	280,009	25,686	7,522	15,393	2,026	213,627	655	12,492	2,608
4 TX A&M U. all campuses	273,193	106,576	15,039	25,727	3,675	112,773	658	5,981	2,764
5 U. CA San Francisco	269,572	0	6,347	0	0	263,225	0	0	0
6 U. CA Berkeley	257,449	82,763	24,039	3,508	1,614	85,285	3,513	46,205	10,522
7 OH State U. all campuses	254,504	74,599	12,733	4,467	29,607	105,307	2,523	19,420	5,848
8 U. MI all campuses	229,469	56,993	6,068	2,467	5,757	124,142	3,942	29,829	271
9 U. CA San Diego	225,625	30,825	10,565	41,469	18,492	115,194	924	6,822	1,334
10 Cornell U. all campuses	225,545	22,366	21,599	3,320	9,277	150,918	4,753	13,312	0
Total, 1st 10 institutions	2,753,300	449,135	155,705	113,560	80,555	1,704,480	27,101	191,156	31,608
11 U. FL	219,208	31,996	11,100	2,738	2,857	158,825	1,426	10,266	0
12 NC State U.	214,814	52,646	13,190	12,467	9,574	116,543	0	6,889	3,505
13 U. IL Urbana-Champaign	212,851	42,709	17,438	26,136	24,489	75,561	4,002	20,531	1,985
14 PA State U. all campuses	208,033	71,640	17,090	12,519	3,696	80,999	5,053	16,119	917
15 U. GA	206,574	6,800	7,270	8,610	6,413	140,012	5,209	32,260	0
16 U. MN all campuses	198,964	18,546	4,085	6,554	3,892	151,757	3,051	11,079	0
17 LA State U. all campuses	189,435	27,650	7,338	23,267	3,754	113,730	636	7,520	5,540
18 Duke U.	180,177	5,360	3,783	4,162	914	159,960	840	5,158	0
19 U. AZ	179,055	21,672	35,175	4,008	3,017	104,182	1,211	9,769	21
20 Purdue U. all campuses	178,301	61,600	7,180	1,447	7,974	80,849	1,926	16,692	633
Total, 1st 20 institutions	4,740,712	789,754	279,354	215,468	147,135	2,886,898	50,455	327,439	44,209
21 GA Institute of Technology all campuses	174,667	117,258	11,817	8,001	23,840	5,555	2,322	1,932	3,942
22 Rutgers The State U. NJ all campuses	167,624	20,887	15,089	13,795	9,041	80,917	5,524	20,645	1,726
23 MI State U.	167,192	16,004	20,252	1,753	2,982	110,407	2,043	13,341	410
24 IN U. all campuses	166,321	2,775	16,724	2,842	7,518	82,645	3,738	27,265	22,814
25 Baylor C. of Medicine	152,449	0	0	0	0	152,449	0	0	0
26 U. MD Baltimore	149,805	0	0	0	0	149,805	0	0	0
27 VA Polytechnic Institute & State U.	149,584	51,555	6,285	2,541	3,640	77,873	959	6,731	0
28 U. TX M. D. Anderson Cancer Ctr.	144,512	0	1,484	0	6,465	136,563	0	0	0
29 U. WA	140,214	16,592	7,915	9,345	1,204	94,303	1,233	9,622	0
30 U. KY all campuses	135,849	23,635	3,349	1,599	3,151	90,634	513	2,794	10,174
Total, 1st 30 institutions	6,288,929	1,038,460	362,269	255,344	204,976	3,868,049	66,787	409,769	83,275
31 U. MD College Park	130,885	29,744	23,675	2,837	13,294	30,029	951	30,355	0
32 MA Institute of Technology	125,082	54,237	3,030	3,294	17,988	16,715	217	4,373	25,228
33 U. PA	124,682	3,579	2,111	737	1,176	89,861	522	22,744	3,952
34 U. NE Lincoln	120,026	20,410	4,798	4,619	3,041	60,778	2,884	9,126	14,370
35 Johns Hopkins U., The	117,725	7,126	1,607	1,113	1,216	89,240	121	1,288	16,014
36 IA State U.	117,245	26,705	4,464	1,860	7,469	61,972	590	5,774	8,411
37 U. IL Chicago	116,669	9,636	5,150	943	3,933	78,607	2,259	8,214	7,927
38 U. NC Chapel Hill	116,235	0	5,291	6,649	2,141	86,896	915	14,343	0
39 U. South FL	113,786	11,022	2,492	8,720	219	82,166	6,727	2,440	0
40 Washington U. St. Louis	113,519	2,829	2,605	2,383	1,376	101,248	824	1,379	875
Total, 1st 40 institutions	7,484,783	1,203,748	417,492	288,499	256,829	4,565,561	82,797	509,805	160,052

See explanatory information and SOURCE at end of table.

TABLE B-41. Non-Federal R&D expenditures at universities and colleges, by science and engineering field: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
41 Stanford U.	111,854	21,703	6,981	2,928	2,605	69,305	1,165	7,167	0
42 SUNY Buffalo all campuses	110,893	13,536	6,136	387	6,581	79,481	1,958	2,686	128
43 U. TX Southwestern Medical Ctr. Dallas	108,700	0	0	0	0	108,700	0	0	0
44 U. IA	108,065	16,589	4,038	1,142	499	79,749	624	5,070	354
45 U. Southern CA	105,752	12,497	2,578	4,187	5,679	70,683	1,025	6,266	2,837
46 Northwestern U.	103,547	13,683	8,117	32	695	69,435	514	8,203	2,868
47 Wayne State U.	103,097	6,372	7,547	67	565	81,663	1,139	4,847	897
48 U. TX Austin	101,808	38,845	20,965	16,990	6,753	11,951	602	5,367	335
49 U. OK all campuses	99,985	11,843	8,262	20,609	3,323	37,522	8,645	9,781	0
50 U. TN system	99,917	21,033	2,412	2,295	4,525	58,479	32	5,591	5,550
Total, 1st 50 institutions	8,538,401	1,359,849	484,528	337,136	288,054	5,232,529	98,501	564,783	173,021
51 U. MO-Columbia	99,269	12,609	1,976	1,202	341	72,681	1,806	8,252	402
52 Rockefeller U.	99,044	0	2,293	0	3,723	93,028	0	0	0
53 U. CA Irvine	93,921	14,661	6,152	3,878	4,662	57,160	988	6,302	118
54 U. Pittsburgh all campuses	93,287	7,866	1,684	244	1,151	74,156	218	7,955	13
55 U. KS all campuses	89,468	10,765	2,798	8,735	1,447	60,666	305	3,922	830
56 U. of Medicine and Dentistry NJ	87,921	0	0	0	0	87,921	0	0	0
57 Clemson U.	87,666	28,213	3,704	9	2,968	35,874	123	4,979	11,796
58 Emory U.	85,155	0	3,308	5	127	76,916	503	4,296	0
59 MS State U.	81,131	14,896	3,516	957	2,104	55,313	742	2,405	1,198
60 Yale U.	79,939	3,155	3,220	315	1,233	66,194	2,252	3,570	0
Total, 1st 60 institutions	9,435,202	1,452,014	513,179	352,481	305,810	5,912,438	105,438	606,464	187,378
61 U. CA Riverside	79,631	10,943	2,057	8,872	847	45,259	192	7,511	3,950
62 U. CT all campuses	78,677	8,738	3,136	3,599	739	54,940	1,592	5,334	599
63 SUNY Stony Brook all campuses	75,923	9,946	9,289	8,213	6,298	38,740	1,063	2,374	0
64 U. UT	74,082	11,835	4,102	1,549	5,990	48,776	538	1,292	0
65 NY U.	72,983	0	672	729	2,697	62,095	2,382	3,014	1,394
66 OR State U.	70,052	6,926	852	5,067	660	54,642	81	1,793	31
67 U. SC all campuses	69,705	13,216	14,951	13,202	1,052	18,252	1,038	6,347	1,647
68 U. Cincinnati all campuses	67,573	13,815	3,426	258	455	43,346	964	2,106	3,203
69 Princeton U.	66,684	18,422	7,599	5,651	3,674	7,800	1,460	22,078	0
70 Auburn U. all campuses	66,343	15,851	806	445	407	47,250	45	1,064	475
Total, 1st 70 institutions	10,156,855	1,561,706	560,069	400,066	328,629	6,333,538	114,793	659,377	198,677
71 U. Rochester	66,303	8,954	1,526	113	271	50,177	4,146	41	1,075
72 CO State U.	66,195	13,843	3,066	10,424	1,123	30,828	1,094	1,853	3,964
73 Harvard U.	64,760	767	2,404	893	17	45,287	267	15,125	0
74 FL State U.	63,895	4,418	24,579	7,534	2,407	7,606	3,514	13,809	28
75 OK State U. all campuses	63,887	10,614	2,951	1,203	677	41,182	407	6,263	590
76 KS State U.	62,816	9,780	1,642	258	740	45,577	356	2,775	1,688
77 Mt. Sinai School of Medicine	59,356	0	0	0	0	59,356	0	0	0
78 U. CO all campuses	59,352	7,042	5,596	4,779	882	37,695	1,040	2,200	118
79 AZ State U. main campus	58,609	26,154	8,941	444	2,261	7,497	1,312	8,048	3,952
80 Medical U. SC	56,227	0	0	0	0	56,227	0	0	0
Total, 1st 80 institutions	10,778,255	1,643,278	610,774	425,714	337,007	6,714,970	126,929	709,491	210,092

See explanatory information and SOURCE at end of table.

TABLE B-41. Non-Federal R&D expenditures at universities and colleges, by science and engineering field: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
81 WA State U.	56,109	7,077	1,762	818	16	38,831	89	6,964	552
82 U. AR main campus	55,475	7,175	3,255	1,752	996	39,660	322	2,315	0
83 TX Tech U.	54,583	12,376	5,941	3,632	1,188	25,374	69	5,401	602
84 U. MA Amherst	54,562	13,458	12,286	2,690	6,958	14,212	1,589	2,206	1,163
85 U. CA Santa Barbara	53,425	19,542	6,922	11,275	4,051	1,111	2,280	6,533	1,711
86 U. TX Medical Branch Galveston	51,434	1,339	0	0	0	50,095	0	0	0
87 U. HI Manoa	50,941	2,400	5,427	17,353	42	20,272	115	1,670	3,662
88 ND State U. all campuses	50,691	980	1,124	114	352	43,985	156	2,660	1,320
89 Carnegie-Mellon U.	50,224	21,308	2,636	859	19,041	1,146	721	4,096	417
90 U. Miami	50,148	872	25	3,990	0	44,923	199	139	0
Total, 1st 90 institutions	11,305,847	1,729,805	650,152	468,197	369,651	6,994,579	132,469	741,475	219,519
91 U. AK Fairbanks all campuses	50,110	3,933	918	27,764	9,040	7,265	0	605	585
92 Columbia U. in the City of New York	48,654	3,981	932	2,832	802	37,984	147	1,875	101
93 U. NM all campuses	46,346	6,467	880	343	329	22,780	1,583	4,478	9,486
94 U. TX Health Science Ctr. San Antonio	45,855	0	0	0	0	45,855	0	0	0
95 VA Commonwealth U.	44,591	1,439	2,001	210	69	39,193	955	724	0
96 U. ID	43,293	4,351	1,122	1,792	243	31,995	111	2,199	1,480
97 Yeshiva U.	42,856	0	0	0	0	42,856	0	0	0
98 Southern IL U. Carbondale	42,815	8,191	1,001	1,313	426	27,216	232	1,997	2,439
99 U. NE Medical Ctr.	42,398	0	0	0	0	42,398	0	0	0
100 U. NH	42,393	9,395	711	10,210	213	16,201	153	1,845	3,665
Total, 1st 100 institutions	11,755,158	1,767,562	657,717	512,661	380,773	7,308,322	135,650	755,198	237,275
101 UT State U.	42,228	5,260	703	6,909	456	18,944	1,075	2,057	6,824
102 U. Louisville	41,996	3,903	579	215	139	34,054	538	2,291	277
103 U. Chicago	41,434	26	5,857	168	126	35,069	31	157	0
104 Brown U.	41,267	5,879	4,301	2,082	4,639	19,096	812	4,458	0
105 U. TX Houston Health Science Ctr.	39,704	0	0	0	0	39,704	0	0	0
106 Dartmouth C.	39,584	4,690	1,092	303	1,068	26,051	1,695	218	4,467
107 San Diego State U.	39,079	5,570	2,090	2,674	1,557	10,954	4,149	5,382	6,703
108 U. AL Birmingham, The	38,832	2,155	869	0	125	35,121	521	41	0
109 U. MA Worcester	38,737	0	0	0	0	38,737	0	0	0
110 U. ME	38,417	8,977	2,106	9,612	1,418	13,647	74	2,514	69
Total, 1st 110 institutions	12,156,436	1,804,022	675,314	534,624	390,301	7,579,699	144,545	772,316	255,615
111 MT State U.-Bozeman	38,225	4,246	3,022	303	56	28,032	0	1,289	1,277
112 Tulane U.	38,174	2,819	1,056	678	248	32,471	249	562	91
113 U. CA Santa Cruz	38,066	1,465	18,519	7,754	1,131	5,707	420	2,936	134
114 Case Western Reserve U.	37,154	5,867	578	61	101	16,959	74	699	12,815
115 U. DE	36,974	12,968	4,103	3,524	1,472	12,976	276	1,655	0
116 U. Central FL	36,422	4,778	8,485	5,695	75	1,848	146	2,730	12,665
117 Tufts U.	36,055	2,700	626	845	158	22,474	2,408	6,844	0
118 NJ Institute of Technology	35,783	17,971	1,995	687	4,607	0	0	243	10,280
119 WV U.	35,591	5,265	858	1,752	123	26,161	119	691	622
120 Vanderbilt U.	35,447	3,736	1,530	20	25	23,916	1,285	1,804	3,131
Total, 1st 120 institutions	12,524,327	1,865,837	716,086	555,943	398,297	7,750,243	149,522	791,769	296,630

See explanatory information and SOURCE at end of table.

TABLE B-41. Non-Federal R&D expenditures at universities and colleges, by science and engineering field: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
121 U. LA Lafayette	34,871	3,280	682	54	5,283	21,348	159	808	3,257
122 Rush U.	34,638	0	0	0	0	34,194	444	0	0
123 NM State U. all campuses	32,764	15,954	1,378	754	489	13,241	209	465	274
124 U. VT	30,322	1,014	418	125	542	26,678	514	103	928
125 U. VA all campuses	29,982	6,741	1,578	360	586	20,046	603	65	3
126 OR Health Sciences U.	28,498	0e	0e	0e	0e	28,400e	98e	0e	0e
127 Medical C. GA	28,388	0	0	0	0	28,388	0	0	0
128 U. Houston	28,252	13,423	3,070	686	2,868	3,309	2,252	2,644	0
129 George Washington U.	27,559	2,973	542	11	1,717	16,463	231	4,656	966
130 TX A&M U. System Health Science Ctr.	27,219	309	0	0	0	26,910	0	0	0
Total, 1st 130 institutions	12,826,820	1,909,531	723,754	557,933	409,782	7,969,220	154,032	800,510	302,058
131 SUNY Albany	26,996	10,149	1,334	2,732	296	4,786	1,018	6,681	0
132 U. NV, Reno	26,763	1,859	372	2,433	32	14,231	126	980	6,730
133 GA State U.	25,597	0	2,637	332	1,800	9,998	3,017	7,813	0
134 U. MD Ctr. for Environmental Science	25,421	0	0	25,421	0	0	0	0	0
135 U. MD Biotechnology Institute	23,837	0	0	5,923	0	17,914	0	0	0
136 Thomas Jefferson U.	23,757	0	0	0	0	23,757	0	0	0
137 C. of William and Mary all campuses	21,851	0	2,145	16,863	206	1,115	261	1,261	0
138 SUNY C. of Environmental Science & Forestry	21,707	8,522 i	1,777 i	2,371 i	0 i	8,819 i	0 i	218 i	0 i
139 U. WY	21,615e	1,443e	889e	2,499e	138e	10,845e	169e	888e	4,744e
140 Woods Hole Oceanographic Institution	21,506	7,707	0	13,799	0	0	0	0	0
Total, 1st 140 institutions	13,065,870	1,939,211	732,908	630,306	412,254	8,060,685	158,623	818,351	313,532
141 Boston U.	21,174	1,710	1,174	511	245	16,208	181	313	832
142 Medical C. WI	20,459	0	0	0	0	20,459	0	0	0
143 CA Institute of Technology	20,060	3,295	4,170	1,924	210	2,466	0	55	7,940
144 Wake Forest U.	19,896	0	478	0	0	18,867	0	0	551
145 U. Memphis, The	19,553	2,659	907	3,196	380	3,012	5,423	2,787	1,189
146 Rensselaer Polytechnic Institute	19,465	15,297	1,957	776	1,176	259	0	0	0
147 Temple U.	19,273	912	748	34	83	12,117	3,339	2,040	0
148 U. of Notre Dame	19,086	5,758	3,015	0	203	2,509	368	1,618	5,615
149 OH U. all campuses	18,924	8,813	2,076	865	69	5,264	657	551	629
150 U. Akron all campuses	18,543	5,064	6,557	204	186	708	53	5,771	0
Total, 1st 150 institutions	13,262,303	1,982,719	753,990	637,816	414,806	8,142,554	168,644	831,486	330,288
151 Uniformed Services U. of the Health Sciences	18,336	0	0	0	0	18,336	0	0	0
152 Brandeis U.	18,116	0	1,226	0	349	5,705	376	10,460	0
153 U. MS all campuses	17,746 i	1,026	1,900	0	154	12,869 i	15	233	1,549
154 U. AR for Medical Sciences	17,555	0	0	0	0	17,555	0	0	0
155 NM Institute of Mining and Technology	17,445	9,388	1,216	5,688	86	353	1	0	713
156 U.S. Air Force Academy	17,426	12,278	2,300	0	293	77	1,985	493	0
157 U. MT, The	16,755	0	599	152	342	9,119	10	2,156	4,377
158 U. MO-Rolla	16,473	12,976	1,715	1,522	102	154	3	1	0
159 U. Toledo	15,829	8,322	2,915	1,263	7	2,500	59	421	342
160 FL International U.	15,597	5,684	1,199	1,271	916	1,629	191	2,922	1,785
Total, 1st 160 institutions	13,433,581	2,032,393	767,060	647,712	417,055	8,210,851	171,284	848,172	339,054

See explanatory information and SOURCE at end of table.

TABLE B-41. Non-Federal R&D expenditures at universities and colleges, by science and engineering field: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
161 Eastern VA Medical School	15,495	0	0	0	0	15,495	0	0	0
162 Wright State U. all campuses	14,892	2,761	663	258	2,431	7,849	473	339	118
163 U. TX Dallas	14,574	4,276	2,507	810	1,882	2,749	56	621	1,673
164 Northeastern U.	14,245	5,488	2,880	0	487	2,615	679	2,096	0
165 Drexel U.	14,233	12,473	475	126	1,006	148	0	5	0
166 U. WI Milwaukee	13,472	2,980	2,113	2,490	811	1,486	260	3,321	11
167 CO School of Mines	13,285	11,580	973	658	68	0	0	6	0
168 U. MO-Kansas City	13,265	275	387	80	412	10,634	875	602	0
169 Syracuse U. all campuses	13,166	3,294	335	164	3,772	384	26	1,816	3,375
170 U. AL Huntsville, The	12,693	5,842	3,061	1,837	788	869	4	133	159
Total, 1st 170 institutions	13,572,901	2,081,362	780,454	654,135	428,712	8,253,080	173,657	857,111	344,390
171 Southern IL U. Edwardsville	12,630	2,500	457	1,892	517	1,104	93	3,630	2,437
172 Creighton U.	12,388	0	0	0	0	12,379	0	9	0
173 SUNY Binghamton	12,384	5,022	1,484	264	594	1,589	1,097	2,147	187
174 Wichita State U.	12,155	10,064	891	22	112	363	491	212	0
175 Old Dominion U.	12,053	5,663	884	1,144	637	2,594	291	840	0
176 MI Technological U.	12,032	7,985	386	175	200	2,719	0	169	398
177 CUNY Hunter C.	11,332	0	1,570	3,453	207	3,383	936	1,686	97
178 MCP Hahnemann U.	11,326	0	0	0	0	11,076	250	0	0
179 U. PR Mayaguez Campus	11,074	5,752	1,064	2,723	227	539	0	769	0
180 Institute of Paper Science and Technology	10,982e	7,548e	2,041e	0e	0e	1,393e	0e	0e	0e
Total, 1st 180 institutions	13,691,257	2,125,896	789,231	663,808	431,206	8,290,219	176,815	866,573	347,509
181 SD State U.	10,970	595	106	456	0	9,164	0	649	0
182 U. AL, The	10,230	4,520	1,889	482	629	847	23	1,535	305
183 Loyola U. (Chicago, IL)	9,929	0	369	7	0	8,564	180	809	0
184 Charles R. Drew U. of Medicine & Science	9,580	0	0	0	0	9,580	0	0	0
185 FL A&M U.	9,555	913	156	64	0	2,425	0	38	5,959
186 SUNY Health Science Ctr. Brooklyn	9,486 i	0 i	0 i	0 i	0 i	9,486 i	0 i	0 i	0 i
187 Georgetown U.	9,363	0	1,081	0	0	7,871	19	392	0
188 Miami U. all campuses	9,258	330 i	2,163 i	125 i	0 i	1,842 i	312 i	1,963 i	2,523 i
189 San Jose State U.	9,226	1,243	1,166	4,521	1,055	87	3	80	1,071
190 Cleveland State U.	9,206	1,825	389	209	5	1,155	27	4,719	877
Total, 1st 190 institutions	13,788,060	2,135,322	796,550	669,672	432,895	8,341,240	177,379	876,758	358,244
191 Lehigh U.	9,168	8,503	583	27	0	51	1	3	0
192 Western MI U.	9,110	2,807	599	519	1,454	1,037	193	2,481	20
193 U. ND all campuses	8,969	4,743	445	446	36	1,713	13	68	1,505
194 Boston C.	8,927	0	1,678	85	4,024	1,257	138	1,745	0
195 SUNY Upstate Medical U.	8,922	0	0	0	0	8,922	0	0	0

See explanatory information and SOURCE at end of table.

TABLE B-41. Non-Federal R&D expenditures at universities and colleges, by science and engineering field: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
196 IL Institute of Technology	8,632	1,926	5,263	0	407	1,023	3	0	10
197 LA Tech U.	8,623	5,127	857	0	778	1,204	135	522	0
198 Rice U.	8,430	2,879	2,487	182	1,386	1,281	46	169	0
199 FL Atlantic U.	8,429	2,026	836	459	1,152	2,379	155	1,261	161
200 Brigham Young U. all campuses	8,328	2,623	868	62	409	2,381	380	1,266	339
Total, 1st 200 institutions	13,875,598	2,165,956	810,166	671,452	442,541	8,362,488	178,443	884,273	360,279
Total, all other sampled institutions	623,090	120,969	74,157	57,361	33,425	189,664	17,805	82,452	47,257

e = estimated.
i = imputed.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-42. R&D expenditures at public universities and colleges, by science and engineering field: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
Total, all institutions	24,830,706	3,961,209	2,025,683	1,655,010	924,480	14,075,618	496,651	1,247,427	444,628
1 U. CA Los Angeles	787,598	51,371	68,211	14,824	15,320	573,899	11,188	42,971	9,814
2 U. MI all campuses	673,724	159,890	27,653	5,524	11,553	364,265	12,259	92,279	301
3 U. WI Madison	662,101	89,683	50,449	34,220	15,674	410,300	24,743	36,982	50
4 U. WA	627,273	58,244	28,015	71,330	11,575	436,160	8,718	13,231	0
5 U. CA San Francisco	596,965	0	27,262	0	0	569,703	0	0	0
6 U. CA San Diego	585,008	61,208	38,999	114,136	58,623	293,994	6,182	10,532	1,334
7 U. MN all campuses	494,265	47,353	22,614	12,055	15,333	372,169	9,768	14,973	0
8 PA State U. all campuses	492,739	193,590	56,959	27,679	11,105	163,590	12,634	25,408	1,774
9 U. CA Berkeley	474,746	137,766	78,918	7,069	7,980	170,348	9,823	51,204	11,638
10 U. CA Davis	456,653	42,674	21,445	29,532	4,793	336,796	1,188	16,578	3,647
Total, 1st 10 institutions	5,851,072	841,779	420,525	316,369	151,956	3,691,224	96,503	304,158	28,558
11 TX A&M U. all campuses	436,681	142,887	29,238	81,950	13,689	155,557	3,078	7,510	2,772
12 OH State U. all campuses	432,387	102,029	28,251	9,231	33,369	214,313	7,876	30,963	6,355
13 U. IL Urbana-Champaign	427,174	104,577	48,218	36,157	78,629	121,383	9,485	24,875	3,850
14 U. Pittsburgh all campuses	400,200	17,438	13,707	609	4,610	344,239	5,669	13,915	13
15 U. CO all campuses	399,818	32,911	58,379	60,896	7,091	219,454	8,246	12,032	809
16 U. AZ	390,827	47,738	77,860	10,219	10,768	222,892	3,342	17,987	21
17 U. FL	386,316	63,205	28,654	5,470	8,752	260,138	6,371	13,726	0
18 U. NC Chapel Hill	370,806	0	18,616	15,402	10,039	277,423	5,584	43,742	0
19 GA Institute of Technology all campuses	340,347	228,484	23,024	15,590	46,455	10,825	4,524	3,765	7,680
20 U. MD College Park	324,980	75,160	81,315	10,949	34,603	56,410	3,970	62,573	0
Total, 1st 20 institutions	9,760,608	1,656,208	827,787	562,842	399,961	5,573,858	154,648	535,246	50,058
21 U. TX Austin	320,966	118,167	73,665	27,396	44,158	39,495	5,350	11,470	1,265
22 IN U. all campuses	299,080	3,243	34,095	4,085	11,133	179,224	10,500	33,908	22,892
23 NC State U.	290,018	76,609	20,267	16,842	15,328	148,461	0	8,604	3,907
24 MI State U.	289,787	23,870	47,401	2,145	7,074	179,521	5,983	23,383	410
25 U. IA	288,808	27,516	18,547	2,178	1,691	227,210	4,521	6,778	367
26 LA State U. all campuses	287,363	42,796	19,668	35,314	4,642	168,782	1,160	9,461	5,540
27 Purdue U. all campuses	285,778	91,370	21,672	4,128	14,369	128,926	4,524	20,095	694
28 U. GA	284,660	8,025	11,145	13,399	7,945	199,155	10,302	34,689	0
29 U. MD Baltimore	266,822	0	0	0	0	266,822	0	0	0
30 U. TX Southwestern Medical Ctr. Dallas	263,958	0	0	0	0	263,958	0	0	0
Total, 1st 30 institutions	12,637,848	2,047,804	1,074,247	668,329	506,301	7,375,412	196,988	683,634	85,133
31 U. TX M. D. Anderson Cancer Ctr.	262,145	0	4,936	0	10,347	246,862	0	0	0
32 U. IL Chicago	259,852	15,679	12,918	1,480	14,288	186,570	6,273	13,319	9,325
33 Rutgers The State U. NJ all campuses	258,829	35,000	31,423	25,279	14,096	118,490	9,527	23,288	1,726
34 U. AL Birmingham, The	255,053	6,639	2,962	0	676	238,232	5,895	649	0
35 SUNY Buffalo all campuses	239,735	37,954	13,633	961	10,333	168,664	3,964	4,098	128
36 U. KY all campuses	236,275	39,297	7,767	3,053	5,903	156,833	3,400	4,867	15,155
37 VA Polytechnic Institute & State U.	232,560	86,257	12,830	13,525	6,742	101,588	2,461	9,157	0
38 U. Cincinnati all campuses	217,739	26,701	5,872	360	539	176,777	1,063	3,206	3,221
39 U. UT	216,707	26,349	15,847	5,097	20,878	144,575	2,347	1,614	0
40 U. CA Irvine	209,469	22,888	20,286	6,857	9,793	135,406	4,649	9,472	118
Total, 1st 40 institutions	15,026,212	2,344,568	1,202,721	724,941	599,896	9,049,409	236,567	753,304	114,806

See explanatory information and SOURCE at end of table.

TABLE B-42. R&D expenditures at public universities and colleges, by science and engineering field: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
41 Wayne State U.	199,007	11,734	16,058	101	1,560	159,013	2,960	6,684	897
42 U. South FL	197,894	19,132	3,555	25,479	393	134,360	11,416	3,559	0
43 IA State U.	188,664	45,727	10,218	4,192	12,269	93,870	644	12,834	8,910
44 U. TN system	188,261	34,785	10,403	5,865	9,988	114,256	189	7,048	5,727
45 SUNY Stony Brook all campuses	184,045	19,123	27,071	20,744	13,227	96,549	3,851	3,480	0
46 U. VA all campuses	182,340	28,866	14,173	4,441	5,393	123,266	5,070	992	139
47 CO State U.	178,845	37,060	10,549	38,167	3,459	69,291	3,979	4,651	11,689
48 U. of Medicine and Dentistry NJ	178,156	0	0	0	0	178,156	0	0	0
49 U. MO-Columbia	177,011	19,736	4,468	2,233	1,251	132,161	4,506	12,254	402
50 U. KS all campuses	172,131	19,096	7,768	11,261	2,012	121,057	1,772	6,901	2,264
Total, 1st 50 institutions	16,872,566	2,579,827	1,306,984	837,424	649,448	10,271,388	270,954	811,707	144,834
51 U. CT all campuses	172,003	16,177	7,665	9,780	1,956	119,232	7,375	9,219	599
52 U. NE Lincoln	171,431	26,482	12,230	7,415	6,284	84,711	6,724	11,792	15,793
53 U. OK all campuses	169,373	16,901	17,763	33,499	3,651	71,181	13,043	13,335	0
54 U. HI Manoa	161,823	7,339	22,167	45,908	10,115	58,286	761	3,514	13,733
55 OR State U.	161,735	20,797	4,300	34,844	3,285	94,684	81	2,748	996
56 OR Health Sciences U.	158,729	0e	0e	0e	0e	152,379e	6,350e	0e	0e
57 MS State U.	158,652	54,882	5,284	6,752	3,374	79,575	1,493	4,653	2,639
58 U. NM all campuses	150,598	26,013	8,165	2,017	3,684	72,901	9,373	7,177	21,268
59 U. TX Houston Health Science Ctr.	138,380	0	0	0	0	138,380	0	0	0
60 Clemson U.	134,840	52,744	8,333	34	3,762	50,676	493	7,001	11,797
Total, 1st 60 institutions	18,450,130	2,801,162	1,392,891	977,673	685,559	11,193,393	316,647	871,146	211,659
61 FL State U.	134,351	15,500	49,388	19,232	5,884	15,637	6,579	22,103	28
62 U. MA Worcester	132,729	0	0	0	0	132,729	0	0	0
63 Medical U. SC	132,030	0	0	0	0	132,030	0	0	0
64 U. CA Santa Barbara	131,795	44,475	25,959	22,840	12,748	4,290	7,077	12,285	2,121
65 U. TX Health Science Ctr. San Antonio	129,616	0	0	0	0	129,616	0	0	0
66 U. TX Medical Branch Galveston	129,534	2,346	0	0	0	127,188	0	0	0
67 U. SC all campuses	123,108	28,314	24,054	20,297	2,318	33,200	3,102	9,757	2,066
68 AZ State U. main campus	123,016	47,861	17,772	10,379	6,567	18,086	6,308	10,083	5,960
69 UT State U.	121,621	55,524	4,344	9,804	1,557	37,392	2,298	3,599	7,103
70 U. AK Fairbanks all campuses	116,279	8,094	1,405	71,747	9,040	22,224	0	1,924	1,845
Total, 1st 70 institutions	19,724,209	3,003,276	1,515,813	1,131,972	723,673	11,845,785	342,011	930,897	230,782
71 WA State U.	112,469	18,114	6,452	4,840	561	70,907	261	10,326	1,008
72 U. CA Riverside	111,936	14,806	7,524	12,273	2,712	59,043	1,737	9,886	3,955
73 VA Commonwealth U.	109,619	3,749	5,064	348	292	95,536	3,214	1,416	0
74 U. MA Amherst	109,332	21,224	26,779	4,550	17,415	30,158	5,144	2,899	1,163
75 Auburn U. all campuses	108,775	32,315	3,625	827	522	65,769	237	2,398	3,082
76 KS State U.	106,804	16,488	11,131	509	2,596	68,452	1,245	3,952	2,431
77 NM State U. all campuses	103,078	61,590	10,224	2,442	1,964	23,139	1,626	1,488	605
78 OK State U. all campuses	94,987	18,295	5,930	1,831	1,067	54,332	495	11,652	1,385
79 U. NH	93,222	17,062	3,077	38,664	672	24,591	950	4,541	3,665
80 U. VT	88,602	2,072	1,505	472	1,155	79,952	974	154	2,318
Total, 1st 80 institutions	20,763,033	3,208,991	1,597,124	1,198,728	752,629	12,417,664	357,894	979,609	250,394

See explanatory information and SOURCE at end of table.

TABLE B-42. R&D expenditures at public universities and colleges, by science and engineering field: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
81 U. DE	85,157	31,312	13,042	10,293	2,936	20,921	1,230	5,423	0
82 WV U.	84,985	22,563	4,308	5,777	448	48,372	324	1,388	1,805
83 U. AR main campus	83,063	11,613	11,336	2,881	1,144	52,830	409	2,850	0
84 TX Tech U.	82,785	18,477	8,644	10,489	1,985	36,628	222	5,738	602
85 U. Louisville	80,974	7,485	1,774	409	324	64,124	2,405	3,830	623
86 MT State U.-Bozeman	78,211	9,921	12,798	824	306	47,193	0	2,761	4,408
87 U. ID	76,758	12,224	2,420	3,944	1,502	50,861	200	3,301	2,306
88 ND State U. all campuses	72,105	2,634	5,292	249	1,211	51,677	665	7,538	2,839
89 U. NE Medical Ctr.	71,000	0	0	0	0	71,000	0	0	0
90 U. CA Santa Cruz	70,967	3,555	31,335	15,367	3,797	12,066	1,034	3,663	150
Total, 1st 90 institutions	21,549,038	3,328,775	1,688,073	1,248,961	766,282	12,873,336	364,383	1,016,101	263,127
91 U. MS all campuses	67,838 i	6,628	15,159	0	498	36,246 i	145	3,937	5,225
92 SUNY Albany	67,493	10,149	2,257	5,693	1,495	35,182	1,885	10,832	0
93 U. NV, Reno	66,721	9,650	5,369	6,909	956	34,621	813	1,672	6,731
94 U. Central FL	66,351	9,972	15,645	9,238	400	5,814	1,902	6,006	17,374
95 San Diego State U.	64,302	8,430	3,660	4,646	2,919	24,271	7,975	5,655	6,746
96 Temple U.	63,850	2,801	7,033	186	881	39,678	10,482	2,789	0
97 U. ME	62,149	13,041	4,190	18,952	1,947	19,654	550	3,746	69
98 NJ Institute of Technology	61,424	33,393	5,434	2,224	7,122	0	0	248	13,003
99 U. Houston	59,707	22,111	6,260	1,192	6,148	11,957	8,457	3,582	0
100 Southern IL U. Carbondale	53,604	9,236	1,530	1,507	522	34,114	481	2,831	3,383
Total, 1st 100 institutions	22,182,477	3,454,186	1,754,610	1,299,508	789,170	13,114,873	397,073	1,057,399	315,658
101 U. RI	53,347	5,341	606	23,869	170	12,207	5,391	462	5,301
102 Medical C. GA	51,705	0	0	0	0	51,705	0	0	0
103 TX A&M U. System Health Science Ctr.	49,636	392	0	135	0	49,014	95	0	0
104 U. AL Huntsville, The	48,353	20,999	12,474	7,003	5,239	2,189	22	147	280
105 U. LA Lafayette	47,796	3,931	692	289	6,243	30,367	159	907	5,208
106 FL International U.	47,654	17,366	3,660	3,883	2,799	4,981	584	8,926	5,455
107 Naval Postgraduate School	45,227 i	12,031 i	2,849 i	10,899 i	9,404 i	0 i	0 i	6,196 i	3,848 i
108 U. AR for Medical Sciences	45,046	0	0	0	0	45,046	0	0	0
109 GA State U.	44,564	0	4,901	505	2,572	17,258	9,009	10,319	0
110 U. OR	43,723	176	8,693	1,578	2,643	18,947	8,848	2,838	0
Total, 1st 110 institutions	22,659,528	3,514,422	1,788,485	1,347,669	818,240	13,346,587	421,181	1,087,194	335,750
111 U. WY	41,632e	3,644e	3,069e	6,483e	535e	19,715e	771e	1,572e	5,843e
112 C. of William and Mary all campuses	39,858	0	7,603	26,493	1,366	2,394	430	1,572	0
113 U. MT, The	39,367	0	1,779	560	903	26,908	155	4,685	4,377
114 George Mason U.	38,849	9,118	379	6,479	6,098	6,278	2,143	8,354	0
115 U. MD Ctr. for Environmental Science	38,501	0	0	38,501	0	0	0	0	0
116 U. AL, The	37,130	19,321	5,165	1,896	1,669	3,067	2,226	3,142	644
117 OH U. all campuses	36,601	18,248	5,543	1,169	118	7,717	1,759	1,087	960
118 U. MD Baltimore County	36,323	7,195	6,134	15,336	1,334	3,099	1,190	2,035	0
119 NM Institute of Mining and Technology	36,309	16,674	2,792	9,004	86	3,104	36	0	4,613
120 SUNY Health Science Ctr. Brooklyn	34,981 i	0 i	0 i	0 i	0 i	34,981 i	0 i	0 i	0 i
Total, 1st 120 institutions	23,039,079	3,588,622	1,820,949	1,453,590	830,349	13,453,850	429,891	1,109,641	352,187

See explanatory information and SOURCE at end of table.

TABLE B-42. R&D expenditures at public universities and colleges, by science and engineering field: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
121 U. MD Biotechnology Institute	34,440	0	0	8,558	0	25,882	0	0	0
122 U. ND all campuses	33,973	17,290	1,034	3,323	233	10,120	19	73	1,881
123 U. Memphis, The	33,625	3,611	1,411	4,340	1,602	4,018	11,084	6,370	1,189
124 U. MO-Rolla	32,222	25,806	3,852	2,072	146	342	3	1	0
125 FL A&M U.	31,147	2,777	1,475	441	0	10,940	2	49	15,463
126 Wright State U. all campuses	30,962	4,634	2,011	424	3,932	18,170	1,327	340	124
127 U. NV, Las Vegas	30,527	4,899 i	4,180 i	14,920 i	1,224 i	3,311 i	162 i	1,829 i	2 i
128 MI Technological U.	30,005	19,625	1,551	1,048	1,169	5,893	0	321	398
129 Desert Research Institute	29,465	0	0	22,123	0	0	0	0	7,342
130 Old Dominion U.	29,223	15,547	2,304	3,847	1,631	3,347	1,399	1,148	0
Total, 1st 130 institutions	23,354,668	3,682,811	1,838,767	1,514,686	840,286	13,535,873	443,887	1,119,772	378,586
131 U. PR Medical Sciences Campus	29,089	0	0	0	0	29,089	0	0	0
132 Uniformed Services U. of the Health Sciences	28,630	0	0	0	0	28,630	0	0	0
133 U. Akron all campuses	28,080	8,100	10,236	574	597	1,365	110	7,098	0
134 CO School of Mines	26,515	17,672	6,789	1,283	597	0	0	174	0
135 SUNY C. of Environmental Science & Forestry	26,337	9,078 i	2,101 i	2,603 i	0 i	12,292 i	0 i	263 i	0 i
136 U. TX Dallas	26,198	5,587	4,785	3,801	3,070	6,029	153	929	1,844
137 CUNY Hunter C.	25,905	0	5,671	3,697	247	9,870	4,141	2,107	172
138 U. Southern MS	25,685	1,544	6,824	10,964	1,419	2,100	357	0	2,477
139 U.S. Air Force Academy	25,589	17,901	3,259	0	657	887	2,024	861	0
140 Jackson State U.	25,445	242	3,238	3,521	5,229	5,823	1,743	607	5,042
Total, 1st 140 institutions	23,622,141	3,742,935	1,881,670	1,541,129	852,102	13,631,958	452,415	1,131,811	388,121
141 San Jose State U.	25,003	2,702	3,142	9,517	1,478	462	6,530	95	1,077
142 U. WI Milwaukee	24,933	4,296	4,988	4,008	1,680	2,509	481	6,960	11
143 U. Toledo	24,825	12,463	5,418	2,228	31	3,619	206	518	342
144 U. MO-Kansas City	24,060	312	1,176	371	788	19,453	1,336	624	0
145 FL Atlantic U.	23,995	8,401	1,674	572	2,196	6,546	1,691	2,288	627
146 U. TX El Paso	23,684	9,059	2,259	5,268	938	4,960	590	610	0
147 U. MA Lowell	22,827	6,625	6,318	1,968	461	3,097	1,777	2,073	508
148 SUNY Upstate Medical U.	22,326	0	0	0	0	22,326	0	0	0
149 SUNY Binghamton	21,343	7,935	2,406	824	912	2,391	3,233	3,447	195
150 SD State U.	20,085	1,471	469	813	13	15,692	0	1,627	0
Total, 1st 150 institutions	23,855,222	3,796,199	1,909,520	1,566,698	860,599	13,713,013	468,259	1,150,053	390,881
Total, all other sampled institutions	975,484	165,010	116,163	88,312	63,881	362,605	28,392	97,374	53,747

e = estimated.
i = imputed.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-43. Federally financed R&D expenditures at public universities and colleges, by science and engineering field: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
Total, all institutions	13,367,288	2,040,965	1,294,580	992,860	553,526	7,529,860	337,878	471,912	145,707
1 U. WA	487,059	41,652	20,100	61,985	10,371	341,857	7,485	3,609	0
2 U. MI all campuses	444,255	102,897	21,585	3,057	5,796	240,123	8,317	62,450	30
3 U. CA Los Angeles	366,762	32,827	33,954	8,520	10,708	266,260	7,211	5,679	1,603
4 U. CA San Diego	359,383	30,383	28,434	72,667	40,131	178,800	5,258	3,710	0
5 U. WI Madison	345,003	58,900	32,913	23,315	10,179	183,930	18,587	17,179	0
6 U. CO all campuses	340,466	25,869	52,783	56,117	6,209	181,759	7,206	9,832	691
7 U. CA San Francisco	327,393	0	20,915	0	0	306,478	0	0	0
8 U. Pittsburgh all campuses	306,913	9,572	12,023	365	3,459	270,083	5,451	5,960	0
9 U. MN all campuses	295,301	28,807	18,529	5,501	11,441	220,412	6,717	3,894	0
10 PA State U. all campuses	284,706	121,950	39,869	15,160	7,409	82,591	7,581	9,289	857
Total, 1st 10 institutions	3,557,241	452,857	281,105	246,687	105,703	2,272,293	73,813	121,602	3,181
11 U. NC Chapel Hill	254,571	0	13,325	8,753	7,898	190,527	4,669	29,399	0
12 U. TX Austin	219,158	79,322	52,700	10,406	37,405	27,544	4,748	6,103	930
13 U. CA Berkeley	217,297	55,003	54,879	3,561	6,366	85,063	6,310	4,999	1,116
14 U. AL Birmingham, The	216,221	4,484	2,093	0	551	203,111	5,374	608	0
15 U. IL Urbana-Champaign	214,323	61,868	30,780	10,021	54,140	45,822	5,483	4,344	1,865
16 U. AZ	211,772	26,066	42,685	6,211	7,751	118,710	2,131	8,218	0
17 U. MD College Park	194,095	45,416	57,640	8,112	21,309	26,381	3,019	32,218	0
18 U. IA	180,743	10,927	14,509	1,036	1,192	147,461	3,897	1,708	13
19 OH State U. all campuses	177,883	27,430	15,518	4,764	3,762	109,006	5,353	11,543	507
20 U. CA Davis	176,644	16,988	13,923	14,139	2,767	123,169	533	4,086	1,039
Total, 1st 20 institutions	5,619,948	780,361	579,157	313,690	248,844	3,349,087	115,330	224,828	8,651
21 U. FL	167,108	31,209	17,554	2,732	5,895	101,313	4,945	3,460	0
22 GA Institute of Technology all campuses	165,680	111,226	11,207	7,589	22,615	5,270	2,202	1,833	3,738
23 TX A&M U. all campuses	163,488	36,311	14,199	56,223	10,014	42,784	2,420	1,529	8
24 U. TX Southwestern Medical Ctr. Dallas	155,258	0	0	0	0	155,258	0	0	0
25 U. VA all campuses	152,358	22,125	12,595	4,081	4,807	103,220	4,467	927	136
26 U. Cincinnati all campuses	150,166	12,886	2,446	102	84	133,431	99	1,100	18
27 U. IL Chicago	143,183	6,043	7,768	537	10,355	107,963	4,014	5,105	1,398
28 U. UT	142,625	14,514	11,745	3,548	14,888	95,799	1,809	322	0
29 IN U. all campuses	132,759	468	17,371	1,243	3,615	96,579	6,762	6,643	78
30 OR Health Sciences U.	130,231	0e	0e	0e	0e	123,979e	6,252e	0e	0e
Total, 1st 30 institutions	7,122,804	1,015,143	674,042	389,745	321,117	4,314,683	148,300	245,747	14,027
31 SUNY Buffalo all campuses	128,842	24,418	7,497	574	3,752	89,183	2,006	1,412	0
32 MI State U.	122,595	7,866	27,149	392	4,092	69,114	3,940	10,042	0
33 U. TX M. D. Anderson Cancer Ctr.	117,633	0	3,452	0	3,882	110,299	0	0	0
34 U. MD Baltimore	117,017	0	0	0	0	117,017	0	0	0
35 U. CA Irvine	115,548	8,227	14,134	2,979	5,131	78,246	3,661	3,170	0
36 CO State U.	112,650	23,217	7,483	27,743	2,336	38,463	2,885	2,798	7,725
37 U. HI Manoa	110,882	4,939	16,740	28,555	10,073	38,014	646	1,844	10,071
38 SUNY Stony Brook all campuses	108,122	9,177	17,782	12,531	6,929	57,809	2,788	1,106	0
39 Purdue U. all campuses	107,477	29,770	14,492	2,681	6,395	48,077	2,598	3,403	61
40 U. NM all campuses	104,252	19,546	7,285	1,674	3,355	50,121	7,790	2,699	11,782
Total, 1st 40 institutions	8,267,822	1,142,303	790,056	466,874	367,062	5,011,026	174,614	272,221	43,666

See explanatory information and SOURCE at end of table.

TABLE B-43. Federally financed R&D expenditures at public universities and colleges, by science and engineering field: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
41 U. KY all campuses	100,426	15,662	4,418	1,454	2,752	66,199	2,887	2,073	4,981
42 U. TX Houston Health Science Ctr.	98,676	0	0	0	0	98,676	0	0	0
43 LA State U. all campuses	97,928	15,146	12,330	12,047	888	55,052	524	1,941	0
44 Wayne State U.	95,910	5,362	8,511	34	995	77,350	1,821	1,837	0
45 U. MA Worcester	93,992	0	0	0	0	93,992	0	0	0
46 U. CT all campuses	93,326	7,439	4,529	6,181	1,217	64,292	5,783	3,885	0
47 OR State U.	91,683	13,871	3,448	29,777	2,625	40,042	0	955	965
48 Rutgers The State U. NJ all campuses	91,205	14,113	16,334	11,484	5,055	37,573	4,003	2,643	0
49 U. of Medicine and Dentistry NJ	90,235	0	0	0	0	90,235	0	0	0
50 U. TN system	88,344	13,752	7,991	3,570	5,463	55,777	157	1,457	177
Total, 1st 50 institutions	9,209,547	1,227,648	847,617	531,421	386,057	5,690,214	189,789	287,012	49,789
51 U. South FL	84,108	8,110	1,063	16,759	174	52,194	4,689	1,119	0
52 U. TX Health Science Ctr. San Antonio	83,761	0	0	0	0	83,761	0	0	0
53 VA Polytechnic Institute & State U.	82,976	34,702	6,545	10,984	3,102	23,715	1,502	2,426	0
54 U. KS all campuses	82,663	8,331	4,970	2,526	565	60,391	1,467	2,979	1,434
55 UT State U.	79,393	50,264	3,641	2,895	1,101	18,448	1,223	1,542	279
56 U. CA Santa Barbara	78,370	24,933	19,037	11,565	8,697	3,179	4,797	5,752	410
57 U. TX Medical Branch Galveston	78,100	1,007	0	0	0	77,093	0	0	0
58 U. GA	78,086	1,225	3,875	4,789	1,532	59,143	5,093	2,429	0
59 U. MO-Columbia	77,742	7,127	2,492	1,031	910	59,480	2,700	4,002	0
60 MS State U.	77,521	39,986	1,768	5,795	1,270	24,262	751	2,248	1,441
Total, 1st 60 institutions	10,012,267	1,403,333	891,008	587,765	403,408	6,151,880	212,011	309,509	53,353
61 Medical U. SC	75,803	0	0	0	0	75,803	0	0	0
62 NC State U.	75,204	23,963	7,077	4,375	5,754	31,918	0	1,715	402
63 IA State U.	71,419	19,022	5,754	2,332	4,800	31,898	54	7,060	499
64 FL State U.	70,456	11,082	24,809	11,698	3,477	8,031	3,065	8,294	0
65 NM State U. all campuses	70,314	45,636	8,846	1,688	1,475	9,898	1,417	1,023	331
66 U. OK all campuses	69,388	5,058	9,501	12,890	328	33,659	4,398	3,554	0
67 U. AK Fairbanks all campuses	66,169	4,161	487	43,983	0	14,959	0	1,319	1,260
68 VA Commonwealth U.	65,028	2,310	3,063	138	223	56,343	2,259	692	0
69 AZ State U. main campus	64,407	21,707	8,831	9,935	4,306	10,589	4,996	2,035	2,008
70 U. VT	58,280	1,058	1,087	347	613	53,274	460	51	1,390
Total, 1st 70 institutions	10,698,735	1,537,330	960,463	675,151	424,384	6,478,252	228,660	335,252	59,243
71 WA State U.	56,360	11,037	4,690	4,022	545	32,076	172	3,362	456
72 U. MA Amherst	54,770	7,766	14,493	1,860	10,457	15,946	3,555	693	0
73 U. SC all campuses	53,403	15,098	9,103	7,095	1,266	14,948	2,064	3,410	419
74 U. NE Lincoln	51,405	6,072	7,432	2,796	3,243	23,933	3,840	2,666	1,423
75 U. NH	50,829	7,667	2,366	28,454	459	8,390	797	2,696	0
76 U. MS all campuses	50,092 i	5,602	13,259	0	344	23,377 i	130	3,704	3,676
77 WV U.	49,394	17,298	3,450	4,025	325	22,211	205	697	1,183
78 U. DE	48,183	18,344	8,939	6,769	1,464	7,945	954	3,768	0
79 Clemson U.	47,174	24,531	4,629	25	794	14,802	370	2,022	1
80 U. RI	45,453	4,328	498	22,849	142	9,568	4,843	454	2,771
Total, 1st 80 institutions	11,205,798	1,655,073	1,029,322	753,046	443,423	6,651,448	245,590	358,724	69,172

See explanatory information and SOURCE at end of table.

TABLE B-43. Federally financed R&D expenditures at public universities and colleges, by science and engineering field: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
81 Temple U.	44,577	1,889	6,285	152	798	27,561	7,143	749	0
82 Naval Postgraduate School	44,379 i	11,804 i	2,796 i	10,695 i	9,228 i	0 i	0 i	6,080 i	3,776 i
83 KS State U.	43,988	6,708	9,489	251	1,856	22,875	889	1,177	743
84 Auburn U. all campuses	42,432	16,464	2,819	382	115	18,519	192	1,334	2,607
85 SUNY Albany	40,497	0	923	2,961	1,199	30,396	867	4,151	0
86 MT State U.-Bozeman	39,986	5,675	9,776	521	250	19,161	0	1,472	3,131
87 U. NV, Reno	39,958	7,791	4,997	4,476	924	20,390	687	692	1
88 U. Louisville	38,978	3,582	1,195	194	185	30,070	1,867	1,539	346
89 U. OR	37,177	23	7,214	1,416	2,597	15,678	8,505	1,744	0
90 U. AL Huntsville, The	35,660	15,157	9,413	5,166	4,451	1,320	18	14	121
Total, 1st 90 institutions	11,613,430	1,724,166	1,084,229	779,260	465,026	6,837,418	265,758	377,676	79,897
91 U. ID	33,465	7,873	1,298	2,152	1,259	18,866	89	1,102	826
92 U. CA Santa Cruz	32,901	2,090	12,816	7,613	2,666	6,359	614	727	16
93 U. CA Riverside	32,305	3,863	5,467	3,401	1,865	13,784	1,545	2,375	5
94 FL International U.	32,057	11,682	2,461	2,612	1,883	3,352	393	6,004	3,670
95 George Mason U.	31,890	8,415	228	6,429	5,974	4,391	1,967	4,486	0
96 U. Houston	31,455	8,688	3,190	506	3,280	8,648	6,205	938	0
97 OK State U. all campuses	31,100	7,681	2,979	628	390	13,150	88	5,389	795
98 U. Central FL	29,929	5,194	7,160	3,543	325	3,966	1,756	3,276	4,709
99 U. MD Baltimore County	29,376	4,275	5,129	14,247	1,060	2,796	826	1,043	0
100 U. NE Medical Ctr.	28,602	0	0	0	0	28,602	0	0	0
Total, 1st 100 institutions	11,926,510	1,783,927	1,124,957	820,391	483,728	6,941,332	279,241	403,016	89,918
Total, all other sampled institutions	1,440,778	257,038	169,623	172,469	69,798	588,528	58,637	68,896	55,789

e = estimated.
i = imputed.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-44. R&D expenditures at private universities and colleges, by science and engineering field: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
Total, all institutions	11,501,935	1,543,018	982,783	367,413	588,035	7,328,554	173,971	335,461	182,700
1 Johns Hopkins U., The [1]	1,140,235	349,481	115,899	35,791	96,354	496,025	3,371	8,193	35,121
2 Stanford U.	538,474	126,204	63,387	8,809	20,292	304,658	4,837	10,287	0
3 U. PA	522,269	18,291	23,609	775	12,434	422,686	3,504	34,590	6,380
4 Cornell U. all campuses	496,123	56,309	66,273	6,117	26,015	314,857	7,055	19,497	0
5 MA Institute of Technology	455,491	171,606	99,254	22,007	46,468	74,762	823	5,793	34,778
6 Duke U.	441,533	19,253	16,837	9,425	6,423	367,043	3,783	18,769	0
7 Washington U. St. Louis	416,960	8,256	12,556	4,971	6,734	374,666	3,039	5,863	875
8 Baylor C. of Medicine	411,924	0	0	0	0	411,924	0	0	0
9 Columbia U. in the City of New York	405,403	19,666	32,054	52,455	9,505	280,697	3,098	7,158	770
10 Harvard U.	401,367	6,773	35,156	15,095	4,287	307,150	6,168	26,738	0
Total, 1st 10 institutions	5,229,779	775,839	465,025	155,445	228,512	3,354,468	35,678	136,888	77,924
11 U. Southern CA	372,397	49,750	8,448	15,381	76,723	205,018	4,650	9,249	3,178
12 Yale U.	354,243	9,905	20,731	2,551	6,335	304,345	5,987	4,389	0
13 Northwestern U.	282,154	47,655	23,694	522	3,699	186,653	3,314	12,473	4,144
14 Emory U.	271,238	0	8,673	9	517	255,462	1,663	4,914	0
15 U. Rochester	261,601	56,192	12,725	752	3,061	175,565	11,737	494	1,075
16 U. Chicago	225,264	219	33,410	4,559	4,607	176,233	3,844	2,392	0
17 NY U.	222,978	0	6,494	729	14,360	177,019	14,629	8,029	1,718
18 CA Institute of Technology	220,004	43,931	107,140	13,131	7,272	37,600	0	1,037	9,893
19 Case Western Reserve U.	219,042	24,133	6,600	433	373	171,688	604	2,396	12,815
20 Vanderbilt U.	208,305	17,861	10,688	172	948	162,125	5,940	6,704	3,867
Total, 1st 20 institutions	7,867,005	1,025,485	703,628	193,684	346,407	5,206,176	88,046	188,965	114,614
21 Boston U.	192,612	20,875	15,800	3,335	2,998	130,144	6,004	1,461	11,995
22 Carnegie-Mellon U.	188,191	47,609	11,263	861	103,196	7,859	7,016	9,569	818
23 Mt. Sinai School of Medicine	185,335	0	0	0	0	185,335	0	0	0
24 U. Miami	171,319	2,364	2,752	37,275	191	117,760	8,412	2,565	0
25 Rockefeller U.	166,603	0	5,439	0	5,411	155,753	0	0	0
26 Princeton U.	164,408	48,947	28,122	15,508	10,896	29,180	5,404	26,351	0
27 Yeshiva U.	157,124	0	0	0	0	157,124	0	0	0
28 Dartmouth C.	126,839	18,326	3,979	1,067	5,343	86,943	5,868	670	4,643
29 Wake Forest U.	111,634	0	1,808	0	224	108,994	0	0	608
30 Brown U.	109,482	14,836	9,427	5,683	13,762	56,523	3,028	6,223	0
Total, 1st 30 institutions	9,440,552	1,178,442	782,218	257,413	488,428	6,241,791	123,778	235,804	132,678
31 Tufts U.	109,291	7,334	2,964	1,020	1,284	84,507	4,133	8,049	0
32 Tulane U.	102,998	7,181	2,515	1,237	1,742	85,598	383	4,251	91
33 Thomas Jefferson U.	102,974	0	0	0	0	102,974	0	0	0
34 Woods Hole Oceanographic Institution	99,964	22,404	0	77,560	0	0	0	0	0
35 Medical C. WI	96,700	0	0	0	0	96,700	0	0	0
36 Georgetown U.	96,450	0	5,172	0	353	87,245	417	3,263	0
37 George Washington U.	86,288	13,763	2,719	182	17,434	42,278	1,065	7,587	1,260
38 Rush U.	79,394	0	0	0	0	77,581	1,813	0	0
39 U. of Notre Dame	52,371	13,388	17,792	0	1,843	9,289	2,177	2,235	5,647
40 Charles R. Drew U. of Medicine & Science	48,839	0	0	0	0	48,839	0	0	0
Total, 1st 40 institutions	10,315,821	1,242,512	813,380	337,412	511,084	6,876,802	133,766	261,189	139,676

See explanatory information and SOURCE at end of table.

TABLE B-44. R&D expenditures at private universities and colleges, by science and engineering field: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
41 Rice U.	48,169	11,401	14,885	1,112	12,258	6,768	877	868	0
42 Brandeis U.	47,122	0	5,230	0	2,090	21,187	1,882	16,733	0
43 U. Dayton	46,554	44,387	1,219	199	97	407	245	0	0
44 Rensselaer Polytechnic Institute	45,955	34,241	5,332	2,306	3,297	779	0	0	0
45 Syracuse U. all campuses	45,870	10,485	4,863	1,116	7,172	2,961	1,978	4,212	13,083
46 Drexel U.	44,465	37,966	2,484	138	3,152	720	0	5	0
47 Northeastern U.	38,540	14,811	8,969	13	2,372	7,788	1,969	2,618	0
48 MCP Hahnemann U.	37,945	0	0	0	0	37,323	622	0	0
49 Loyola U. (Chicago, IL)	37,607	0	1,901	26	137	33,352	1,168	1,023	0
50 St. Louis U. all campuses	35,444	18	51	691	260	34,241	71	1	111
Total, 1st 50 institutions	10,743,492	1,395,821	858,314	343,013	541,919	7,022,328	142,578	286,649	152,870
51 Howard U.	35,387	3,347	2,160	1	2,757	24,138	2,553	427	4
52 Boston C.	31,754	0	8,421	687	13,743	3,450	580	4,873	0
53 Eastern VA Medical School	28,572	0	0	0	0	28,572	0	0	0
54 NY Medical C.	25,222	0	0	0	0	25,222	0	0	0
55 Loma Linda U.	23,996	0	0	0	0	19,545	0	1	4,450
56 Morehouse School of Medicine	23,956	0	0	0	0	23,956	0	0	0
57 Catholic U. America	22,883	1,805	18,565	0	0	783	957	754	19
58 Lehigh U.	22,687	17,726	3,017	882	65	951	39	7	0
59 Brigham Young U. all campuses	21,228	8,125	3,716	182	1,701	4,466	776	1,903	359
60 Meharry Medical C.	20,508	0	0	0	0	20,508	0	0	0
Total, 1st 60 institutions	10,999,685	1,426,824	894,193	344,765	560,185	7,173,919	147,483	294,614	157,702
61 IL Institute of Technology	19,909	4,750	8,041	0	861	5,874	373	0	10
62 Creighton U.	18,982	0	174	95	0	18,704	0	9	0
63 Clark Atlanta U.	17,194	2,531	3,772	0	1,044	2,988	0	960	5,899
64 Institute of Paper Science and Technology	13,929e	9,611e	2,925e	0e	0e	1,393e	0e	0e	0e
65 Stevens Institute of Technology	13,855e	6,989 i	1,448 i	2,567 i	678 i	0 i	0 i	2,173 i	0 i
66 Rochester Institute of Technology	13,500	5,601	5,168	829	233	1,580	7	82	0
67 Albany Medical C.	13,104	0	0	0	0	13,104	0	0	0
68 Mercer U. all campuses	12,998	8,755	1,011	0	50	2,897	28	14	243
69 U. Tulsa	11,603	7,589	1,659	332	1,237	563	156	67	0
70 Hampton U.	11,067	410	7,147	2,919	453	87	0	51	0
Total, 1st 70 institutions	11,145,826	1,473,060	925,538	351,507	564,741	7,221,109	148,047	297,970	163,854
71 Polytechnic U.	10,915	9,479	0	0	1,412	0	0	24	0
72 U. Denver	10,539	3,199	2,428	150	106	1,326	2,483	847	0
73 Worcester Polytechnic Institute	10,493	8,319	730	0	1,154	248	0	42	0
74 Teachers C. Columbia U.	10,409	0	0	0	333	1,470	3,301	5,305	0
75 Tuskegee U.	9,965	1,016	186	0	0	6,751	0	2,012	0
76 Marquette U.	9,807	2,239	1,045	0	154	2,375	125	1,007	2,862
77 Southern Methodist U.	9,774	2,583	1,650	1,769	1,175	1,167	574	540	316
78 Miles C.	8,785	564 i	2,053 i	706 i	767 i	3,010 i	525 i	497 i	663 i
79 Finch U. of Health Sciences/Chicago Medical School	8,645	0	0	0	0	8,069	576	0	0
80 Clarkson U.	8,322e	6,642e	1,373e	0e	162e	113e	32e	0e	0e
Total, 1st 80 institutions	11,243,480	1,507,101	935,003	354,132	570,004	7,245,638	155,663	308,244	167,695

See explanatory information and SOURCE at end of table.

TABLE B-44. R&D expenditures at private universities and colleges, by science and engineering field: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
81 Rose-Hulman Institute of Technology	7,912	4,733	2,205	0	974	0	0	0	0
82 Harvey Mudd C.	7,306 i	1,975 i	1,109 i	74 i	263 i	3,160 i	51 i	302 i	372 i
83 Universidad Central Del Caribe	7,103	0	0	0	0	7,103	0	0	0
84 Alfred U. all campuses	6,916	6,916	0	0	0	0	0	0	0
85 FL Institute of Technology	6,669	1,293	737	874	2,460	1,080	225	0	0
86 Xavier U. LA	6,413	402 i	1,952 i	0 i	0 i	3,434 i	0 i	0 i	625 i
87 Duquesne U.	5,955	0	1,440	0	92	4,354	0	69	0
88 New School U.	5,791e	0e	0e	0e	0e	719e	46e	5,026e	0e
89 Wesleyan U.	5,614	0	2,162	191	96	2,568	467	130	0
90 Wellesley C.	5,498e	0e	596e	24e	112e	820e	15e	585e	3,346e
Total, 1st 90 institutions	11,308,657	1,522,420	945,204	355,295	574,001	7,268,876	156,467	314,356	172,038
91 Villanova U.	5,481e	3,866e	528e	150e	316e	462e	124e	35	0
92 Embry-Riddle Aeronautical U.	5,102	534	832	136	455	0	86	355	2,704
93 American U.	4,420	0	777	0	277	53	436	2,877	0
94 Ponce School of Medicine	4,365	0	0	0	0	4,365	0	0	0
95 U. Scranton	3,873	0	358	0	13	3,502	0	0	0
96 Baylor U.	3,868	73	1,689	407	172	235	178	104	1,010
97 Fordham U.	3,793	0	6	2	52	1,512	1,526	695	0
98 Bryn Mawr C.	3,502	0	1,556	284	390	143	702	427	0
99 Clark U.	3,418	0	741	0	26	210	329	2,112	0
100 Nova Southeastern U.	3,327	0	0	2,439	0	329	498	0	61
Total, 1st 100 institutions	11,349,806	1,526,893	951,691	358,713	575,702	7,279,687	160,346	320,961	175,813
Total, all other sampled institutions	152,129	16,125	31,092	8,700	12,333	48,867	13,625	14,500	6,887

[1] Johns Hopkins University includes the Applied Physics Laboratory.

e = estimated.
i = imputed.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-45. Federally financed R&D expenditures at private universities and colleges, by science and engineering field: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
Total, all institutions	8,466,665	1,176,337	829,563	300,750	483,023	5,322,160	136,496	144,251	74,085
1 Johns Hopkins U., The [1]	1,022,510	342,355	114,292	34,678	95,138	406,785	3,250	6,905	19,107
2 Stanford U.	426,620	104,501	56,406	5,881	17,687	235,353	3,672	3,120	0
3 U. PA	397,587	14,712	21,498	38	11,258	332,825	2,982	11,846	2,428
4 Columbia U. in the City of New York	356,749	15,685	31,122	49,623	8,703	242,713	2,951	5,283	669
5 Harvard U.	336,607	6,006	32,752	14,202	4,270	261,863	5,901	11,613	0
6 MA Institute of Technology	330,409	117,369	96,224	18,713	28,480	58,047	606	1,420	9,550
7 Washington U. St. Louis	303,441	5,427	9,951	2,588	5,358	273,418	2,215	4,484	0
8 Yale U.	274,304	6,750	17,511	2,236	5,102	238,151	3,735	819	0
9 Cornell U. all campuses	270,578	33,943	44,674	2,797	16,738	163,939	2,302	6,185	0
10 U. Southern CA	266,645	37,253	5,870	11,194	71,044	134,335	3,625	2,983	341
Total, 1st 10 institutions	3,985,450	684,001	430,300	141,950	263,778	2,347,429	31,239	54,658	32,095
11 Duke U.	261,356	13,893	13,054	5,263	5,509	207,083	2,943	13,611	0
12 Baylor C. of Medicine	259,475	0	0	0	0	259,475	0	0	0
13 CA Institute of Technology	199,944	40,636	102,970	11,207	7,062	35,134	0	982	1,953
14 U. Rochester	195,298	47,238	11,199	639	2,790	125,388	7,591	453	0
15 Emory U.	186,083	0	5,365	4	390	178,546	1,160	618	0
16 U. Chicago	183,830	193	27,553	4,391	4,481	141,164	3,813	2,235	0
17 Case Western Reserve U.	181,888	18,266	6,022	372	272	154,729	530	1,697	0
18 Northwestern U.	178,607	33,972	15,577	490	3,004	117,218	2,800	4,270	1,276
19 Vanderbilt U.	172,858	14,125	9,158	152	923	138,209	4,655	4,900	736
20 Boston U.	171,438	19,165	14,626	2,824	2,753	113,936	5,823	1,148	11,163
Total, 1st 20 institutions	5,976,227	871,489	635,824	167,292	290,962	3,818,311	60,554	84,572	47,223
21 NY U.	149,995	0	5,822	0	11,663	114,924	12,247	5,015	324
22 Carnegie-Mellon U.	137,967	26,301	8,627	2	84,155	6,713	6,295	5,473	401
23 Mt. Sinai School of Medicine	125,979	0	0	0	0	125,979	0	0	0
24 U. Miami	121,171	1,492	2,727	33,285	191	72,837	8,213	2,426	0
25 Yeshiva U.	114,268	0	0	0	0	114,268	0	0	0
26 Princeton U.	97,724	30,525	20,523	9,857	7,222	21,380	3,944	4,273	0
27 Wake Forest U.	91,738	0	1,330	0	224	90,127	0	0	57
28 Dartmouth C.	87,255	13,636	2,887	764	4,275	60,892	4,173	452	176
29 Georgetown U.	87,087	0	4,091	0	353	79,374	398	2,871	0
30 Thomas Jefferson U.	79,217	0	0	0	0	79,217	0	0	0
Total, 1st 30 institutions	7,068,628	943,443	681,831	211,200	399,045	4,584,022	95,824	105,082	48,181
31 Woods Hole Oceanographic Institution	78,458	14,697	0	63,761	0	0	0	0	0
32 Medical C. WI	76,241	0	0	0	0	76,241	0	0	0
33 Tufts U.	73,236	4,634	2,338	175	1,126	62,033	1,725	1,205	0
34 Brown U.	68,215	8,957	5,126	3,601	9,123	37,427	2,216	1,765	0
35 Rockefeller U.	67,559	0	3,146	0	1,688	62,725	0	0	0
36 Tulane U.	64,824	4,362	1,459	559	1,494	53,127	134	3,689	0
37 George Washington U.	58,729	10,790	2,177	171	15,717	25,815	834	2,931	294
38 Rush U.	44,756	0	0	0	0	43,387	1,369	0	0
39 U. Dayton	40,191	38,490	1,176	192	43	290	0	0	0
40 Rice U.	39,739	8,522	12,398	930	10,872	5,487	831	699	0
Total, 1st 40 institutions	7,680,576	1,033,895	709,651	280,589	439,108	4,950,554	102,933	115,371	48,475

See explanatory information and SOURCE at end of table.

TABLE B-45. Federally financed R&D expenditures at private universities and colleges, by science and engineering field: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
41 Charles R. Drew U. of Medicine & Science	39,259	0	0	0	0	39,259	0	0	0
42 Howard U.	33,949	3,125	1,987	1	2,586	23,343	2,553	351	3
43 U. of Notre Dame	33,285	7,630	14,777	0	1,640	6,780	1,809	617	32
44 Syracuse U. all campuses	32,704	7,191	4,528	952	3,400	2,577	1,952	2,396	9,708
45 St. Louis U. all campuses	31,215	0	51	642	260	30,220	42	0	0
46 Drexel U.	30,232	25,493	2,009	12	2,146	572	0	0	0
47 Brandeis U.	29,006	0	4,004	0	1,741	15,482	1,506	6,273	0
48 Loyola U. (Chicago, IL)	27,678	0	1,532	19	137	24,788	988	214	0
49 MCP Hahnemann U.	26,619	0	0	0	0	26,247	372	0	0
50 Rensselaer Polytechnic Institute	26,490	18,944	3,375	1,530	2,121	520	0	0	0
Total, 1st 50 institutions	7,991,013	1,096,278	741,914	283,745	453,139	5,120,342	112,155	125,222	58,218
51 Northeastern U.	24,295	9,323	6,089	13	1,885	5,173	1,290	522	0
52 Boston C.	22,827	0	6,743	602	9,719	2,193	442	3,128	0
53 Morehouse School of Medicine	21,919	0	0	0	0	21,919	0	0	0
54 Meharry Medical C.	20,453	0	0	0	0	20,453	0	0	0
55 Loma Linda U.	20,114	0	0	0	0	17,011	0	0	3,103
56 NY Medical C.	19,318	0	0	0	0	19,318	0	0	0
57 Catholic U. America	17,925	1,169	15,129	0	0	677	917	22	11
58 Clark Atlanta U.	15,325	2,318	3,101	0	896	2,968	0	568	5,474
59 Lehigh U.	13,519	9,223	2,434	855	65	900	38	4	0
60 Eastern VA Medical School	13,077	0	0	0	0	13,077	0	0	0
Total, 1st 60 institutions	8,179,785	1,118,311	775,410	285,215	465,704	5,224,031	114,842	129,466	66,806
61 Brigham Young U. all campuses	12,900	5,502	2,848	120	1,292	2,085	396	637	20
62 IL Institute of Technology	11,277	2,824	2,778	0	454	4,851	370	0	0
63 Hampton U.	10,058	400	6,248	2,819	453	87	0	51	0
64 Albany Medical C.	8,901	0	0	0	0	8,901	0	0	0
65 Mercer U. all campuses	8,607	7,223	230	0	0	1,140	0	14	0
66 U. Denver	8,386	2,592	2,204	128	106	745	2,339	272	0
67 Stevens Institute of Technology	8,094e	4,670 i	1,142 i	811 i	288 i	0 i	0 i	1,183 i	0 i
68 Miles C.	7,943	493 i	1,867 i	665 i	716 i	2,808 i	500 i	354 i	540 i
69 Rochester Institute of Technology	7,868	2,778	3,645	128	0	1,228	7	82	0
70 Tuskegee U.	7,703	762	168	0	0	5,444	0	1,329	0
Total, 1st 70 institutions	8,271,522	1,145,555	796,540	289,886	469,013	5,251,320	118,454	133,388	67,366
71 U. Tulsa	6,806	4,073	1,058	311	958	304	42	60	0
72 Creighton U.	6,594	0	174	95	0	6,325	0	0	0
73 Universidad Central Del Caribe	6,470	0	0	0	0	6,470	0	0	0
74 Southern Methodist U.	6,026	836	993	1,591	850	1,058	294	404	0
75 Xavier U. LA	6,019	388 i	1,934 i	0 i	0 i	3,072 i	0 i	0 i	625 i

See explanatory information and SOURCE at end of table.

TABLE B-45. Federally financed R&D expenditures at private universities and colleges, by science and engineering field: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Engi-neering	Physical sciences	Environ-mental sciences	Math & computer sciences	Life sciences	Psychology	Social sciences	Other sciences
76 Teachers C. Columbia U.	5,939	0	0	0	321	1,385	2,636	1,597	0
77 Finch U. of Health Sciences/Chicago Medical School	5,638	0	0	0	0	5,110	528	0	0
78 Worcester Polytechnic Institute	5,013	3,669	508	0	691	135	0	10	0
79 Polytechnic U.	4,918	4,226	0	0	692	0	0	0	0
80 Villanova U.	4,551e	3,200	420	150e	241	425	115	0	0
Total, 1st 80 institutions	8,329,496	1,161,947	801,627	292,033	472,766	5,275,604	122,069	135,459	67,991
81 Clarkson U.	4,286e	3,559e	472e	0e	127e	96e	32e	0e	0e
82 Embry-Riddle Aeronautical U.	4,174	500	773	136	228	0	86	250	2,201
83 Wesleyan U.	3,734	0	1,611	93	59	1,621	310	40	0
84 Ponce School of Medicine	3,720	0	0	0	0	3,720	0	0	0
85 U. Scranton	3,715	0	225	0	0	3,490	0	0	0
86 FL Institute of Technology	3,646	412	498	486	1,625	623	2	0	0
87 Marquette U.	3,565	874	683	0	114	1,824	5	64	1
88 American U.	3,467	0	647	0	210	40	411	2,159	0
89 Wellesley C.	3,446e	0e	413e	24e	31e	600e	8e	376e	1,994e
90 Clark U.	3,418	0	741	0	26	210	329	2,112	0
Total, 1st 90 institutions	8,366,667	1,167,292	807,690	292,772	475,186	5,287,828	123,252	140,460	72,187
91 Fisk U.	3,030	0	3,030	0	0	0	0	0	0
92 Spelman C.	2,968	0	850	267	14	1,643	194	0	0
93 Institute of Paper Science and Technology	2,947e	2,063e	884e	0e	0e	0e	0e	0e	0e
94 U. Redlands	2,674	0	0	2,596	0	78	0	0	0
95 Maharishi U. of Management	2,618	0	0	0	0	2,618	0	0	0
96 TX Christian U.	2,492	70	165	57	0	58	2,142	0	0
97 Duquesne U.	2,232	0	504	0	68	1,615	0	45	0
98 St. Joseph's U.	2,069	0	0	0	60	331	1,673	5	0
99 Ithaca C.	2,060	0	0	0	1,632	417	11	0	0
100 Fordham U.	1,990	0	0	0	38	414	1,373	165	0
Total, 1st 100 institutions	8,391,747	1,169,425	813,123	295,692	476,998	5,295,002	128,645	140,675	72,187
Total, all other sampled institutions	74,918	6,912	16,440	5,058	6,025	27,158	7,851	3,576	1,898

[1] Johns Hopkins University includes the Applied Physics Laboratory.

e = estimated.
i = imputed.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-46. Total and federally financed R&D expenditures at historically black colleges and universities, ranked by fiscal year 2002 total R&D expenditures: fiscal years 1999-2002

(Dollars in thousands)

Institution and ranking	Total				Federally financed			
	1999	2000	2001	2002	1999	2000	2001	2002
Total, all institutions	254,825	263,863	317,668	360,667	216,508	227,930	271,848	305,720
1 Howard U.	23,557	27,254	30,148	35,387	21,658	25,292	27,848	33,949
2 FL A&M U.	21,622	21,612	23,865	31,147	20,693	16,278	22,477	21,592
3 Jackson State U.	8,823	12,027	25,663	25,445	7,925	10,690	22,750	21,721
4 Morehouse School of Medicine	13,622	16,889	19,670	23,956	12,948	15,419	18,127	21,919
5 Meharry Medical C.	9,460	9,460e	14,984 i	20,508	9,192	9,192e	14,822 i	20,453
6 Clark Atlanta U.	19,467	16,891	17,173	17,194	12,116	16,170	14,354	15,325
7 AL A&M U.	11,562	8,238	11,977 i	15,717	8,558	7,056	8,883 i	10,710
8 NC Agricultural and Technical State U.	14,741	13,400	15,629	15,353	12,454	11,187	11,937	11,953
9 TN State U.	10,762	11,285	12,791	15,262	8,522	8,873	10,210	11,218
10 U. of the VI	3,310	3,310e	8,645 i	13,981	1,957	1,957e	6,288 i	10,620
Total, 1st 10 institutions	136,926	140,366	180,545	213,950	116,023	122,114	157,696	179,460
11 Hampton U.	7,472	9,323	9,158	11,067	7,168	8,994	8,377	10,058
12 Prairie View A&M U.	10,157	9,464	11,297	10,444	8,675	7,679	7,094	7,712
13 Southern U. A&M C. all campuses	9,296	8,302	9,052 i	10,012 i	6,689	6,418	7,059 i	7,903 i
14 Tuskegee U.	9,223	8,893	9,539	9,965	6,942	6,694	7,259	7,703
15 Miles C.	--	--	--	8,785	--	--	--	7,943
16 VA State U.	2,611	4,422	5,066	7,144	2,061	3,602	4,246	6,895
17 Xavier U. LA	3,294	3,425	5,113	6,413	3,240	3,174	4,666	6,019
18 KY State U.	713e	2,354 i	3,996	6,188	703e	2,179 i	3,655	6,036
19 U. AR Pine Bluff	4,151e	4,695 i	5,240	5,976	2,911e	2,754 i	2,596	3,016
20 Alcorn State U.	5,223	8,034	7,370	5,809	5,223	8,034	7,370	5,809
Total, 1st 20 institutions	189,066	199,278	246,376	295,753	159,635	171,642	210,018	248,554
21 Norfolk State U.	2,995	3,408	3,984	4,967	2,970	3,273	3,952	4,902
22 U. DC	3,394	2,737	3,001	4,223	1,829	1,629	2,008	2,963
23 TX Southern U.	2,507	2,182	2,468	4,189	2,292	1,844	1,908	3,910
24 Langston U.	2,340	2,553	2,863	3,975	2,340	2,553	2,863	3,975
25 Lincoln U. (Jefferson City, MO)	2,686	2,502	2,236	3,291	2,686	2,502	2,236	2,513
26 DE State U.	2,765	3,415	2,494	3,162	2,055	3,052	2,222	2,819
27 Spelman C.	2,007	2,082	3,406	3,082	1,832	1,978	3,262	2,968
28 Fisk U.	4,034	3,401	2,722	3,030	2,846	2,652	2,577	3,030
29 Ft. Valley State U.	2,937	2,768	2,768e	2,985	2,318	2,417	2,417e	2,985
30 SC State U.	2,900	2,915	2,915e	2,931	1,978	1,988	1,988e	1,998
Total, 1st 30 institutions	217,631	227,241	275,233	331,588	182,781	195,530	235,451	280,617
31 Morehouse C.	2,853	2,853e	2,853 i	2,853 i	1,843	1,843e	1,843 i	1,843 i
32 Grambling State U.	1,997e	2,264	2,264e	2,452	1,936e	2,200	2,200e	1,977
33 Bowie State U.	2,675	2,675e	2,207	2,330	2,360	2,360e	2,022	2,200
34 Savannah State U.	513	905	2,181	2,206	513	905	2,181	2,206
35 Winston-Salem State U.	1,712	3,447	6,057	2,022	1,619	3,216	4,853	2,022
36 Albany State U.	1,019e	1,393	1,972	1,987	1,019e	840	740	1,640
37 Morgan State U.	1,066	4,371	2,390	1,674	1,066	4,371	2,390	1,674
38 AL State U.	1,365	1,365e	1,433e	1,433	1,190	1,190e	1,249e	1,249
39 Benedict C.	966 i	1,143	1,044	1,061	933 i	1,143	1,014	966
40 Elizabeth City State U.	1,040	1,558	1,248	1,058	1,040	1,558	1,248	1,058
Total, 1st 40 institutions	232,837	249,215	298,882	350,664	196,300	215,156	255,191	297,452

See explanatory information and SOURCE at end of table.

TABLE B-46. Total and federally financed R&D expenditures at historically black colleges and universities, ranked by fiscal year 2002 total R&D expenditures: fiscal years 1999-2002

(Dollars in thousands)

Institution and ranking	Total				Federally financed			
	1999	2000	2001	2002	1999	2000	2001	2002
41 NC Central U.	825e	808 i	913 i	1,035 i	777e	761 i	853 i	971 i
42 MS Valley State U.	495	834	1,316	1,030	495	834	1,316	1,030
43 Tougaloo C.	1,227	895	1,007	1,007 i	767	473	407	407 i
44 Southern U. New Orleans	--	183	680	937	--	60e	652	902
45 Bennett C.	811e	811 i	811 i	811 i	583e	583 i	583 i	583 i
46 Bethune Cookman C.	583	586	926	794	583	586	926	794
47 Lincoln U. (Lincoln University, PA)	972	709	620	718	972	709	620	718
48 VA Union U.	671e	671 i	671 i	671 i	537e	537 i	537 i	537 i
49 Oakwood C.	567	567e	567 i	567 i	447	447e	447 i	447 i
50 Central State U.	1,497e	560e	560 i	560 i	1,144e	283e	283 i	283 i
Total, 1st 50 institutions	240,485	255,839	306,953	358,794	202,605	220,429	261,815	304,124
51 Dillard U.	175	264	349	528	164	182	199	393
52 Morris Brown C.	321 i	116	116e	343	321 i	116	116e	343
53 Fayetteville State U.	265	507	589	311	265	507	298	311
54 Wilberforce U.	280 i	280 i	280 i	280 i	236 i	236 i	236 i	236 i
55 Claflin C.	555	555e	2,074	203	250	250e	1,958	203
56 Shaw U.	100	100e	100 i	100 i	100	100e	100 i	100 i
57 WV State C.	55	55e	63e	63 i	0	0e	0e	0 i
58 Jarvis Christian C.	56	55	55e	30	56	55	55e	10
59 Wiley C.	0	0	0	15	0	0	0	0
60 Bluefield State C.	0	0	0	0	0	0	0	0
Total, 1st 60 institutions	242,292	257,771	310,579	360,667	203,997	221,875	264,777	305,720
61 Coppin State C.	11	0	0	0	11	0	0	0
62 Johnson C. Smith U.	8,659	287	195	0	8,659	250	195	0
63 Le Moyne-Owen C.	1,053	1,700	1,268	0	1,031	1,700	1,250	0
64 Philander Smith C.	72	72e	0	0	72	72e	0	0
65 Rust C.	114	138	0	0	114	138	0	0
66 Selma U.	116	0	0e	0	116	0	0e	0
67 Talladega C.	0	0	0	0	0	0	0	0
68 U. MD Eastern Shore	2,508	3,895	5,626	0	2,508	3,895	5,626	0
69 Knoxville C.	0	--	--	--	0	--	--	--
Total, 1st 69 institutions*	254,825	263,863	317,668	360,667	216,508	227,930	271,848	305,720

-- = not available.
e = estimated.
i = imputed.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-47. Total and federally financed R&D expenditures in engineering at universities and colleges, ranked by fiscal year 2002 total R&D expenditures in engineering: fiscal years 1999-2002

(Dollars in thousands)

Institution and rnaking	Total				Federally financed			
	1999	2000	2001	2002	1999	2000	2001	2002
Total, all institutions	4,260,962	4,553,577	5,006,732	5,504,227	2,440,637	2,573,486	2,845,685	3,217,302
1 Johns Hopkins U., The [1]	225,813	251,993	284,936	349,481	221,320	247,231	278,116	342,355
2 GA Institute of Technology all campuses	172,053	197,589	201,581	228,484	73,638	81,862	94,589	111,226
3 PA State U. all campuses	138,455	162,795	183,823	193,590	80,195	99,076	110,576	121,950
4 MA Institute of Technology	153,789	149,282	148,795	171,606	110,676	106,362	102,226	117,369
5 U. MI all campuses	132,935	137,773	143,487	159,890	84,757	88,108	91,611	102,897
6 TX A&M U. all campuses	108,249	118,494	124,227	142,887	31,065	31,008	31,514	36,311
7 U. CA Berkeley	107,062	120,757	128,984	137,766	51,323	56,757	54,554	55,003
8 Stanford U.	114,272	108,220	111,194	126,204	98,864	91,594	92,036	104,501
9 U. TX Austin	95,987	100,294	110,119	118,167	61,383	65,769	72,061	79,322
10 U. IL Urbana-Champaign	91,373	95,353	104,108	104,577	53,912	57,385	60,525	61,868
Total, 1st 10 institutions	1,339,988	1,442,550	1,541,254	1,732,652	867,133	925,152	987,808	1,132,802
11 OH State U. all campuses	77,090	82,705	96,297	102,029	20,467	21,302	25,802	27,430
12 Purdue U. all campuses	70,106	71,515	78,561	91,370	36,509	31,300	30,109	29,770
13 U. WI Madison	61,363	71,293	82,652	89,683	34,500	41,315	50,565	58,900
14 VA Polytechnic Institute & State U.	53,530	66,963	80,349	86,257	25,584	26,084	32,817	34,702
15 NC State U.	80,586	76,839	81,949	76,609	27,008	25,259	32,403	23,963
16 U. MD College Park	76,548	76,091	75,574	75,160	42,645	40,494	39,841	45,416
17 U. FL	46,186	47,513	54,559	63,205	20,227	23,973	25,624	31,209
18 NM State U. all campuses	47,632	46,790	50,500	61,590	38,257	39,179	39,664	45,636
19 U. CA San Diego	47,725	46,660	50,301	61,208	25,273	24,534	24,190	30,383
20 U. WA	34,889	39,009	49,629	58,244	21,875	24,906	30,547	41,652
Total, 1st 20 institutions	1,935,643	2,067,928	2,241,625	2,498,007	1,159,478	1,223,498	1,319,370	1,501,863
21 Cornell U. all campuses	49,641	54,860	53,444	56,309	31,243	30,977	29,776	33,943
22 U. Rochester	41,864	46,494	49,396	56,192	36,235	40,942	41,036	47,238
23 UT State U.	32,083	41,074	59,162	55,524	27,360	31,180	48,154	50,264
24 MS State U.	30,713	38,107	44,736	54,882	20,914	25,329	30,887	39,986
25 Clemson U.	30,583	35,374	50,307	52,744	8,331	9,636	23,994	24,531
26 U. CA Los Angeles	46,108	46,434	46,854	51,371	29,527	29,689	28,438	32,827
27 U. Southern CA	42,148	46,319	49,865	49,750	32,688	34,857	37,144	37,253
28 Princeton U.	39,080	41,026	46,947	48,947	22,316	21,220	23,363	30,525
29 AZ State U. main campus	34,378	36,612	42,485	47,861	13,841	13,978	18,454	21,707
30 U. AZ	43,094	48,272	52,486	47,738	25,320	29,305	31,493	26,066
Total, 1st 30 institutions	2,325,335	2,502,500	2,737,307	3,019,325	1,407,253	1,490,611	1,632,109	1,846,203
31 Northwestern U.	42,618	44,685	47,799	47,655	30,446	30,492	28,746	33,972
32 Carnegie-Mellon U.	38,676	36,892	40,635	47,609	24,272	24,754	25,672	26,301
33 U. MN all campuses	38,564	41,343	41,659	47,353	24,055	24,515	25,585	28,807
34 IA State U.	40,019	47,049	44,099	45,727	13,207	16,863	16,995	19,022
35 U. CA Santa Barbara	37,147	38,902	35,393	44,475	27,670	28,834	23,566	24,933
36 U. Dayton	33,386	36,325	38,997	44,387	28,403	29,831	32,310	38,490
37 CA Institute of Technology	40,470	43,662	46,377	43,931	37,675	35,711	41,810	40,636
38 LA State U. all campuses	37,781	41,628	44,813	42,796	15,326	18,937	19,823	15,146
39 U. CA Davis	29,528	35,197	41,928	42,674	10,069	12,693	14,571	16,988
40 U. KY all campuses	27,478	31,426	29,767	39,297	10,140	12,253	13,318	15,662
Total, 1st 40 institutions	2,691,002	2,899,609	3,148,774	3,465,229	1,628,516	1,725,494	1,874,505	2,106,160

See explanatory information and SOURCE at end of table.

TABLE B-47. Total and federally financed R&D expenditures in engineering at universities and colleges, ranked by fiscal year 2002 total R&D expenditures in engineering: fiscal years 1999-2002

(Dollars in thousands)

Institution and rnaking	Total				Federally financed			
	1999	2000	2001	2002	1999	2000	2001	2002
41 Drexel U.	17,351	15,828	22,767	37,966	10,620	9,795	16,665	25,493
42 SUNY Buffalo all campuses	29,946	32,301	29,725	37,954	14,579	16,121	17,080	24,418
43 CO State U.	13,670	15,452	28,708	37,060	6,430	8,162	19,973	23,217
44 Rutgers The State U. NJ all campuses	29,097	33,681	33,575	35,000	12,867	15,101	12,271	14,113
45 U. TN system	27,772	32,928	36,580	34,785	11,676	11,971	14,608	13,752
46 Rensselaer Polytechnic Institute	28,275	31,036	34,069	34,241	14,857	17,616	18,391	18,944
47 NJ Institute of Technology	19,714	18,274	31,572	33,393	11,162	3,358	12,729	15,422
48 U. CO all campuses	26,187	31,174	33,021	32,911	15,925	23,331	24,704	25,869
49 Auburn U. all campuses	20,575	23,859	31,568	32,315	11,392	12,106	15,112	16,464
50 U. DE	26,908	23,730	25,360	31,312	11,701	12,009	13,213	18,344
Total, 1st 50 institutions	2,930,497	3,157,872	3,455,719	3,812,166	1,749,725	1,855,064	2,039,251	2,302,196
51 U. VA all campuses	21,706	23,937	25,838	28,866	16,643	18,361	19,932	22,125
52 U. SC all campuses	21,578	23,095	25,573	28,314	12,595	14,923	15,061	15,098
53 U. IA	20,409	22,921	24,772	27,516	8,495	9,534	9,489	10,927
54 U. Cincinnati all campuses	25,453	24,127	26,114	26,701	12,801	11,604	12,244	12,886
55 U. NE Lincoln	22,112	22,365	24,584	26,482	4,257	4,400	5,783	6,072
56 U. UT	21,816	25,293	25,565	26,349	13,405	15,561	15,283	14,514
57 U. NM all campuses	26,998	26,464	24,737	26,013	21,305	21,979	20,384	19,546
58 U. MO-Rolla	18,277	19,698	21,610	25,806	6,141	7,161	8,963	12,830
59 Case Western Reserve U.	26,239	25,518	22,050	24,133	17,695	17,301	16,639	18,266
60 MI State U.	16,673	20,695	20,845	23,870	4,913	5,913	6,970	7,866
Total, 1st 60 institutions	3,151,758	3,391,985	3,697,407	4,076,216	1,867,975	1,981,801	2,169,999	2,442,326
61 U. CA Irvine	12,461	15,518	18,035	22,888	4,787	5,590	7,433	8,227
62 WV U.	20,601	20,560	17,269	22,563	10,188	8,668	7,567	17,298
63 Woods Hole Oceanographic Institution	12,999	16,637	19,180	22,404	9,297	12,801	15,368	14,697
64 U. Houston	17,661	18,081	19,320	22,111	5,423	5,721	5,316	8,688
65 U. MA Amherst	15,146	17,476	18,811	21,224	5,747	6,800	6,605	7,766
66 U. AL Huntsville, The	16,887	17,154	16,671	20,999	8,556	8,964	13,049	15,157
67 Boston U.	16,110	17,455	18,219	20,875	14,767	15,274	16,275	19,165
68 OR State U.	14,440	13,903	17,005	20,797	9,648	8,651	10,654	13,871
69 U. MO-Columbia	20,312	21,818	22,637	19,736	6,105	8,669	8,446	7,127
70 Columbia U. in the City of New York	15,645	16,393	16,702	19,666	13,450	13,068	13,852	15,685
Total, 1st 70 institutions	3,314,020	3,566,980	3,881,256	4,289,479	1,955,943	2,076,007	2,274,564	2,570,007
71 MI Technological U.	18,896	18,387	19,688	19,625	9,581	10,041	11,300	11,640
72 U. AL, The	13,241	17,058	19,965	19,321	9,939	11,227	12,955	14,801
73 Duke U.	14,650	15,249	16,530	19,253	11,002	11,358	12,075	13,893
74 U. South FL	12,902	16,698	19,063	19,132	5,106	4,615	6,494	8,110
75 SUNY Stony Brook all campuses	11,047	15,574	15,110	19,123	6,410	8,098	7,084	9,177
76 U. KS all campuses	13,085	12,403	15,850	19,096	5,799	5,570	7,895	8,331
77 TX Tech U.	16,384	16,748	15,751	18,477	6,861	6,178	5,249	6,101
78 Dartmouth C.	7,365	8,691	14,137	18,326	5,526	7,112	10,294	13,636
79 OK State U. all campuses	14,655	16,752	18,589	18,295	5,706	6,465	7,051	7,681
80 U. PA	13,911	13,315	14,247	18,291	10,598	9,651	10,666	14,712
Total, 1st 80 institutions	3,450,156	3,717,855	4,050,186	4,478,418	2,032,471	2,156,322	2,365,627	2,678,089

See explanatory information and SOURCE at end of table.

TABLE B-47. Total and federally financed R&D expenditures in engineering at universities and colleges, ranked by fiscal year 2002 total R&D expenditures in engineering: fiscal years 1999-2002

(Dollars in thousands)

Institution and rnaking	Total				Federally financed			
	1999	2000	2001	2002	1999	2000	2001	2002
81 OH U. all campuses	9,548	10,487	11,876	18,248	5,188	5,643	6,219	9,435
82 WA State U.	14,288	16,660	15,366	18,114	7,727	9,878	8,622	11,037
83 U.S. Air Force Academy	1,222	1,786	2,719	17,901	1,194	1,760	2,625	5,623
84 Vanderbilt U.	9,764	12,223	15,103	17,861	6,595	8,667	11,750	14,125
85 Lehigh U.	22,190	19,503	23,902	17,726	9,152	8,460	9,968	9,223
86 CO School of Mines	14,578	13,878	16,288	17,672	5,967	5,195	6,169	6,092
87 U. Pittsburgh all campuses	8,912	11,858	15,614	17,438	4,168	6,595	7,823	9,572
88 FL International U.	10,359	14,641	19,211	17,366	8,984	8,576	10,384	11,682
89 U. ND all campuses	8,860	7,970	9,831	17,290	6,892	6,094	7,616	12,547
90 U. NH	8,207	12,462	19,101	17,062	2,889	4,789	7,377	7,667
Total, 1st 90 institutions	3,558,084	3,839,323	4,199,197	4,655,096	2,091,227	2,221,979	2,444,180	2,775,092
91 U. OK all campuses	15,592	15,163	14,026	16,901	3,176	4,122	3,661	5,058
92 NM Institute of Mining and Technology	16,835	14,393	15,846	16,674	7,807	5,912	7,839	7,286
93 KS State U.	13,356	15,935	15,099	16,488	4,526	5,611	5,500	6,708
94 U. CT all campuses	23,793	27,294	28,225	16,177	6,041	5,228	5,640	7,439
95 U. IL Chicago	15,107	19,007	20,646	15,679	5,696	9,333	10,384	6,043
96 Old Dominion U.	10,056	11,712	13,122	15,547	6,196	7,558	9,440	9,884
97 FL State U.	11,237	11,673	11,889	15,500	7,431	7,159	7,099	11,082
98 Brown U.	9,529	9,958	14,337	14,836	5,250	5,626	9,239	8,957
99 Northeastern U.	13,118	11,680	13,845	14,811	9,835	8,250	8,842	9,323
100 U. CA Riverside	8,439	9,995	11,528	14,806	2,141	2,976	3,090	3,863
Total, 1st 100 institutions	3,695,146	3,986,133	4,357,760	4,812,515	2,149,326	2,283,754	2,514,914	2,850,735
Total, all other sampled institutions	565,816	567,444	648,972	691,712	291,311	289,732	330,771	366,567

[1] Johns Hopkins University includes the Applied Physics Laboratory.

e = estimated.
i = imputed.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-48. R&D expenditures in engineering subfields at universities and colleges: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Aero/ astro-nautical	Bioengin-eering/ Biomed-ical	Chemical	Civil	Elec-trical	Mechanical	Metal-lurgical and materials	Other
Total, all institutions	5,504,227	341,970	285,476	430,076	720,965	1,302,813	779,047	467,278	1,176,602
1 Johns Hopkins U., The [1]	349,481	34,678 i	11,802 i	7,405 i	7,229 i	104,062 i	70,233 i	1,982 i	112,090
2 GA Institute of Technology all campuses	228,484	19,142	14,719	9,442	11,882	104,909	30,519	14,412	23,459
3 PA State U. all campuses	193,590	4,609	4,536	14,149	23,253	63,682	33,357	48,364	1,640
4 MA Institute of Technology	171,606	18,575	18,595	15,146	12,324	34,174	26,906	17,942	27,944
5 U. MI all campuses	159,890	5,382	7,131	5,636	10,572	50,401	31,743	4,848	44,177
6 TX A&M U. all campuses	142,887	9,056	2,213	9,541	53,228	6,965	15,254	4,556	42,074
7 U. CA Berkeley	137,766	0	0	6,842	38,151	65,905	95	168	26,605
8 Stanford U.	126,204	8,065	0	9,361	10,784	28,075	21,597	2,802	45,520
9 U. TX Austin	118,167	10,080	3,788	8,313	19,302	31,374	12,630	17,059	15,621
10 U. IL Urbana-Champaign	104,577	4,480	27	7,279	18,750	36,278	11,073	14,541	12,149
Total, 1st 10 institutions	1,732,652	114,067	62,811	93,114	205,475	525,825	253,407	126,674	351,279
11 OH State U. all campuses	102,029	2,515	1,404	7,130	8,799	16,631	10,565	19,959	35,026
12 Purdue U. all campuses	91,370	5,548	7,670	5,951	13,607	19,897	13,798	1,567	23,332
13 U. WI Madison	89,683	0	3,280	6,474	5,419	9,164	4,257	3,430	57,659
14 VA Polytechnic Institute & State U.	86,257	4,572	354	3,348	15,539	22,945	12,984	4,554	21,961
15 NC State U.	76,609	5,773	6,347	18,851	9,097	11,833	7,510	7,424	9,774
16 U. MD College Park	75,160	10,339	0	1,710	6,843	10,306	12,945	6,049	26,968
17 U. FL	63,205	3,816	957	3,840	21,439	6,130	3,296	10,780	12,947
18 NM State U. all campuses	61,590	16,467	0	3,362	2,639	8,850	596	3,147	26,529
19 U. CA San Diego	61,208	0	11,245	0	0	28,170	5,795	900	15,098
20 U. WA	58,244	3,097	16,176	5,713	6,597	14,261	3,113	2,146	7,141
Total, 1st 20 institutions	2,498,007	166,194	110,244	149,493	295,454	674,012	328,266	186,630	587,714
21 Cornell U. all campuses	56,309	4,170	0	4,044	6,335	13,603	1,157	4,002	22,998
22 U. Rochester	56,192	0	1,063	863	0	3,082	41,894	0	9,290
23 UT State U.	55,524	13,480	0	0	539	2,357	33,639	0	5,509
24 MS State U.	54,882	2,016	0	3,636	1,528	6,823	2,014	0	38,865
25 Clemson U.	52,744	0	4,014	8,321	8,359	9,119	5,276	8,922	8,733
26 U. CA Los Angeles	51,371	0	727	4,223	3,115	23,303	14,807	3,864	1,332
27 U. Southern CA	49,750	4,531	3,392	1,790	4,390	27,821	1,303	1,035	5,488
28 Princeton U.	48,947	8,364	0	3,359	3,454	23,331	0	10,145	294
29 AZ State U. main campus	47,861	62	7,896	3,965	10,285	14,730	6,332	0	4,591
30 U. AZ	47,738	3,468	1,821	4,520	11,266	12,381	10,696	451	3,135
Total, 1st 30 institutions	3,019,325	202,285	129,157	184,214	344,725	810,562	445,384	215,049	687,949
31 Northwestern U.	47,655	0	3,967	4,409	5,243	5,819	5,039	11,123	12,055
32 Carnegie-Mellon U.	47,609	0	3,555	5,018	3,574	18,411	1,875	4,990	10,186
33 U. MN all campuses	47,353	4,666	868	7,670	11,150	6,708	9,663	160	6,468
34 IA State U.	45,727	8,849	0	1,453	7,510	6,275	2,199	2,561	16,880
35 U. CA Santa Barbara	44,475	0	14	4,974	0	19,142	3,441	15,890	1,014
36 U. Dayton	44,387	6,347	0	619	298	1,413	9,083	20,055	6,572
37 CA Institute of Technology	43,931	6,928	0	5,085	5,009	10,694	3,197	4,190	8,828
38 LA State U. all campuses	42,796	0	0	4,077	8,694	1,705	5,252	8,588	14,480
39 U. CA Davis	42,674	0	7,508	4,675	11,273	6,278	7,081	0	5,859
40 U. KY all campuses	39,297	0	2,074	1,401	7,643	2,383	2,792	5,310	17,694
Total, 1st 40 institutions	3,465,229	229,075	147,143	223,595	405,119	889,390	495,006	287,916	787,985

See explanatory information and SOURCE at end of table.

TABLE B-48. R&D expenditures in engineering subfields at universities and colleges: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Aero/ astro- nautical	Bioengin- eering/ Biomed- ical	Chemical	Civil	Elec- trical	Mechanical	Metal- lurgical and materials	Other
41 Drexel U.	37,966	0	4,235	2,467	2,704	18,876	1,965	3,012	4,707
42 SUNY Buffalo all campuses	37,954	51	1,507	1,985	14,149	2,047	12,416	606	5,193
43 CO State U.	37,060	0	18,987	1,859	7,339	3,290	4,477	0	1,108
44 Rutgers The State U. NJ all campuses	35,000	0	6,729	2,394	2,955	7,112	5,731	8,130	1,949
45 U. TN system	34,785	4,946	0	1,091	13,291	3,934	0	3,554	7,969
46 Rensselaer Polytechnic Institute	34,241	0	1,203	2,574	5,226	3,537	3,277	2,353	16,071
47 NJ Institute of Technology	33,393	0	1,831	2,111	14,124	5,558	2,235	0	7,534
48 U. CO all campuses	32,911	12,005	117	3,284	7,747	5,848	3,277	0	633
49 Auburn U. all campuses	32,315	1,179	0	5,398	4,872	6,344	3,806	1,248	9,468
50 U. DE	31,312	0	0	8,189	5,348	7,867	4,559	0	5,349
Total, 1st 50 institutions	3,812,166	247,256	181,752	254,947	482,874	953,803	536,749	306,819	847,966
51 U. VA all campuses	28,866	0	3,255	1,793	2,168	7,378	3,851	8,442	1,979
52 U. SC all campuses	28,314	0	0	5,890	1,858	11,358	3,087	0	6,121
53 U. IA	27,516	0	1,180	2,389	9,696	2,616	3,626	0	8,009
54 U. Cincinnati all campuses	26,701	2,466	571	1,661	7,900	9,156	2,791	2,123	33
55 U. NE Lincoln	26,482	0	2,253	5,169	5,808	5,466	2,525	912	4,349
56 U. UT	26,349	0	3,789	6,413	6,729	1,566	2,808	3,482	1,562
57 U. NM all campuses	26,013	0	0	1,932	4,477	6,239	1,000	10,439	1,926
58 U. MO-Rolla	25,806	1,138	0	308	3,881	7,016	2,376	6,574	4,513
59 Case Western Reserve U.	24,133	0	6,030	4,952	477	3,645	4,406	4,292	331
60 MI State U.	23,870	0	0	7,030	3,551	4,415	6,162	0	2,712
Total, 1st 60 institutions	4,076,216	250,860	198,830	292,484	529,419	1,012,658	569,381	343,083	879,501
61 U. CA Irvine	22,888	0	1,796	3,374	4,994	8,317	2,948	0	1,459
62 WV U.	22,563	2,772	0	2,549	3,096	4,722	7,269	357	1,798
63 Woods Hole Oceanographic Institution	22,404	1,584 i	0 i	1,586 i	1,733 i	5,353 i	5,138 i	0 i	7,010
64 U. Houston	22,111	4,083	0	2,933	2,668	3,875	1,597	6,440	515
65 U. MA Amherst	21,224	0	0	3,621	4,156	8,108	4,651	0	688
66 U. AL Huntsville, The	20,999	0	0	626	789	9,817	5,961	0	3,806
67 Boston U.	20,875	1,100	12,575	0	0	3,917	1,100	2,104	79
68 OR State U.	20,797	0	4,337	340	3,904	2,366	1,357	2,010	6,483
69 U. MO-Columbia	19,736	24	0	2,490	3,600	4,181	2,574	3,464	3,403
70 Columbia U. in the City of New York	19,666	0	2,402	1,822	470	2,686	816	949	10,521
Total, 1st 70 institutions	4,289,479	260,423	219,940	311,825	554,829	1,066,000	602,792	358,407	915,263
71 MI Technological U.	19,625	0	329	1,357	5,165	787	6,311	3,263	2,413
72 U. AL, The	19,321	4,577	0	1,972	3,039	987	1,717	3,030	3,999
73 Duke U.	19,253	0	6,967	0	1,767	6,513	3,176	0	830
74 U. South FL	19,132	0	0	927	10,137	4,996	1,722	984	366
75 SUNY Stony Brook all campuses	19,123	0	4,338	0	0	4,704	2,557	6,843	681
76 U. KS all campuses	19,096	2,117	55	4,002	3,859	8,345	447	118	153
77 TX Tech U.	18,477	0	0	3,357	4,701	5,328	872	2,554	1,665
78 Dartmouth C.	18,326	0	0	0	1,010	4,183	2,044	0	11,089
79 OK State U. all campuses	18,295	285	0	1,636	895	2,078	2,721	0	10,680
80 U. PA	18,291	0	4,849	2,098	805	1,281	1,799	3,731	3,728
Total, 1st 80 institutions	4,478,418	267,402	236,478	327,174	586,207	1,105,202	626,158	378,930	950,867

See explanatory information and SOURCE at end of table.

TABLE B-48. R&D expenditures in engineering subfields at universities and colleges: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Aero/ astro- nautical	Bioengin- eering/ Biomed- ical	Chemical	Civil	Elec- trical	Mechanical	Metal- lurgical and materials	Other
81 OH U. all campuses	18,248	8,938	31	979	1,664	3,054	2,440	38	1,104
82 WA State U.	18,114	0	3,461	924	3,562	3,057	2,727	3,498	885
83 U.S. Air Force Academy	17,901	16,941	0	0	113	94	753	0	0
84 Vanderbilt U.	17,861	0	3,956	1,128	2,658	7,908	1,923	2	286
85 Lehigh U.	17,726	0	128	1,134	5,764	1,791	1,644	6,089	1,176
86 CO School of Mines	17,672	0	0	5,305	0	0	0	9,195	3,172
87 U. Pittsburgh all campuses	17,438	0	3,287	4,198	703	3,258	948	2,987	2,057
88 FL International U.	17,366	0	521	0	868	1,216	695	0	14,066
89 U. ND all campuses	17,290	0	0	159	274	27	131	0	16,699
90 U. NH	17,062	0	0	689	5,424	7,483	1,479	1,695	292
Total, 1st 90 institutions	4,655,096	293,281	247,862	341,690	607,237	1,133,090	638,898	402,434	990,604
91 U. OK all campuses	16,901	306	0	5,080	3,961	3,147	2,505	0	1,902
92 NM Institute of Mining and Technology	16,674	0	0	5,576	0	433	0	1,151	9,514
93 KS State U.	16,488	0	0	2,435	2,399	735	1,493	0	9,426
94 U. CT all campuses	16,177	0	0	2,596	4,998	3,638	1,133	3,327	485
95 U. IL Chicago	15,679	0	3,868	974	2,239	3,308	4,635	0	655
96 Old Dominion U.	15,547	3,565	0	0	524	8,018	1,076	0	2,364
97 FL State U.	15,500	0	14	285	1,276	2,226	11,547	5	147
98 Brown U.	14,836	1,052 i	0 i	1,060 i	1,130 i	3,521 i	3,453 i	0 i	4,620
99 Northeastern U.	14,811	0	0	3,037	682	3,887	1,637	0	5,568
100 U. CA Riverside	14,806	0	0	1,569	0	1,300	858	0	11,079
Total, 1st 100 institutions	4,812,515	298,204	251,744	364,302	624,446	1,163,303	667,235	406,917	1,036,364
Total, all other sampled institutions	691,712	43,766	33,732	65,774	96,519	139,510	111,812	60,361	140,238

[1] Johns Hopkins University includes the Applied Physics Laboratory.

e = estimated.
i = imputed.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-49. Federally financed R&D expenditures in engineering subfields at universities and colleges: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Aero/ astro-nautical	Bioengin-eering/ Biomed-ical	Chemical	Civil	Elec-trical	Mechanical	Metal-lurgical and materials	Other
Total, all institutions	3,217,302	245,591	169,281	228,543	307,939	817,403	507,328	262,188	679,029
1 Johns Hopkins U., The [1]	342,355	33,051 i	10,027 i	6,803 i	6,243 i	103,482 i	69,195 i	1,683 i	111,871
2 PA State U. all campuses	121,950	3,190	2,537	7,466	9,527	48,516	24,468	25,539	707
3 MA Institute of Technology	117,369	16,122	14,140	11,014	7,929	22,688	14,197	9,951	21,328
4 GA Institute of Technology all campuses	111,226	9,318	7,165	4,596	5,784	51,070	14,857	7,016	11,420
5 Stanford U.	104,501	7,106	0	7,655	7,754	22,313	17,875	2,113	39,685
6 U. MI all campuses	102,897	3,942	4,148	3,411	5,479	33,574	20,162	2,585	29,596
7 U. TX Austin	79,322	8,644	3,081	4,109	1,625	27,030	10,239	11,576	13,018
8 U. IL Urbana-Champaign	61,868	3,556	0	4,309	10,950	24,183	4,711	9,381	4,778
9 U. WI Madison	58,900	0	2,337	3,725	3,362	6,098	1,384	2,277	39,717
10 U. CA Berkeley	55,003	0	0	2,412	5,526	32,406	0	3	14,656
Total, 1st 10 institutions	1,155,391	84,929	43,435	55,500	64,179	371,360	177,088	72,124	286,776
11 UT State U.	50,264	13,152	0	0	109	1,259	33,388	0	2,356
12 U. Rochester	47,238	0	195	792	0	2,301	37,530	0	6,420
13 NM State U. all campuses	45,636	14,478	0	2,935	1,536	6,862	451	2,767	16,607
14 U. MD College Park	45,416	7,326	0	1,090	1,765	9,411	6,977	4,865	13,982
15 U. WA	41,652	2,961	11,657	4,714	3,494	10,236	2,108	1,422	5,060
16 CA Institute of Technology	40,636	6,351	0	3,895	5,009	9,788	3,132	4,190	8,271
17 MS State U.	39,986	866	0	2,035	483	4,894	555	0	31,153
18 U. Dayton	38,490	5,702	0	321	182	745	7,451	18,616	5,473
19 U. Southern CA	37,253	3,731	2,732	1,133	2,988	20,918	1,204	874	3,673
20 TX A&M U. all campuses	36,311	4,916	742	2,904	6,659	2,113	4,795	279	13,903
Total, 1st 20 institutions	1,578,273	144,412	58,761	75,319	86,404	439,887	274,679	105,137	393,674
21 VA Polytechnic Institute & State U.	34,702	2,138	257	1,060	4,941	10,461	5,594	2,046	8,205
22 Northwestern U.	33,972	0	2,485	2,912	3,071	4,433	3,624	8,715	8,732
23 Cornell U. all campuses	33,943	2,862	0	2,922	2,173	8,604	831	1,641	14,910
24 U. CA Los Angeles	32,827	0	181	3,012	1,075	15,701	10,715	2,143	0
25 U. FL	31,209	2,688	0	2,061	5,769	3,173	2,295	7,054	8,169
26 Princeton U.	30,525	4,518	0	1,816	2,092	13,480	0	8,530	89
27 U. CA San Diego	30,383	0	8,862	0	0	11,158	4,033	0	6,330
28 Purdue U. all campuses	29,770	2,484	2,933	2,082	2,170	10,193	3,632	767	5,509
29 U. MN all campuses	28,807	4,077	641	4,009	5,800	4,510	6,049	0	3,721
30 OH State U. all campuses	27,430	451	346	1,132	2,057	4,655	3,932	7,185	7,672
Total, 1st 30 institutions	1,891,841	163,630	74,466	96,325	115,552	526,255	315,384	143,218	457,011
31 Carnegie-Mellon U.	26,301	0	381	3,705	2,558	7,641	1,484	2,960	7,572
32 U. AZ	26,066	2,460	489	2,424	8,774	5,307	4,889	351	1,372
33 U. CO all campuses	25,869	10,551	110	2,222	5,993	3,889	2,950	0	154
34 Drexel U.	25,493	0	2,843	1,776	1,602	13,846	1,240	2,021	2,165
35 U. CA Santa Barbara	24,933	0	0	3,377	0	10,965	2,266	7,612	713
36 Clemson U.	24,531	0	2,059	3,504	2,990	4,911	2,202	4,348	4,517
37 SUNY Buffalo all campuses	24,418	40	1,157	910	7,325	994	11,879	420	1,693
38 NC State U.	23,963	3,034	1,024	5,332	2,539	4,693	2,152	3,366	1,823
39 CO State U.	23,217	0	14,108	921	4,746	2,132	496	0	814
40 U. VA all campuses	22,125	0	2,648	1,318	1,392	5,342	2,669	7,688	1,068
Total, 1st 40 institutions	2,138,757	179,715	99,285	121,814	153,471	585,975	347,611	171,984	478,902

See explanatory information and SOURCE at end of table.

TABLE B-49. Federally financed R&D expenditures in engineering subfields at universities and colleges: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Aero/ astro- nautical	Bioengin- eering/ Biomed- ical	Chemical	Civil	Elec- trical	Mechanical	Metal- lurgical and materials	Other
41 AZ State U. main campus	21,707	28	3,796	2,587	4,421	5,813	3,984	0	1,078
42 U. NM all campuses	19,546	0	0	1,526	3,179	4,931	803	8,162	945
43 Boston U.	19,165	1,069	11,244	0	0	3,684	1,069	2,020	79
44 IA State U.	19,022	6,656	0	893	1,771	2,530	1,529	1,957	3,686
45 Rensselaer Polytechnic Institute	18,944	0	863	2,201	2,747	2,625	2,395	1,314	6,799
46 U. DE	18,344	0	0	4,657	3,122	3,995	3,068	0	3,502
47 Case Western Reserve U.	18,266	0	4,780	2,976	311	2,524	4,077	3,598	0
48 WV U.	17,298	2,741	0	1,943	2,619	3,261	5,145	314	1,275
49 U. CA Davis	16,988	0	2,320	2,775	2,801	2,801	1,619	0	4,672
50 Auburn U. all campuses	16,464	579	0	1,643	2,578	3,358	2,849	909	4,548
Total, 1st 50 institutions	2,324,501	190,788	122,288	143,015	177,020	621,497	374,149	190,258	505,486
51 Columbia U. in the City of New York	15,685	0	1,137	477	201	2,339	816	790	9,925
52 U. KY all campuses	15,662	0	722	862	5,450	1,175	1,275	741	5,437
53 NJ Institute of Technology	15,422	0	589	174	11,910	1,766	760	0	223
54 U. AL Huntsville, The	15,157	0	0	422	401	7,745	4,481	0	2,108
55 LA State U. all campuses	15,146	0	0	1,609	2,585	718	1,214	1,242	7,778
56 U. SC all campuses	15,098	0	0	3,207	1,214	8,222	1,958	0	497
57 U. AL, The	14,801	4,280	0	1,469	2,247	809	1,095	1,954	2,947
58 U. PA	14,712	0	4,164	1,697	46	1,101	1,640	3,257	2,807
59 Woods Hole Oceanographic Institution	14,697	1,046 i	0 i	1,142 i	1,154 i	3,842 i	2,850 i	0 i	4,663
60 U. UT	14,514	0	2,050	4,244	2,785	593	2,332	2,228	282
Total, 1st 60 institutions	2,475,395	196,114	130,950	158,318	205,013	649,807	392,570	200,470	542,153
61 Vanderbilt U.	14,125	0	2,618	1,040	1,751	6,856	1,574	2	284
62 Rutgers The State U. NJ all campuses	14,113	0	2,503	360	89	2,074	4,940	3,076	1,071
63 Duke U.	13,893	0	5,682	0	697	4,788	2,294	0	432
64 OR State U.	13,871	0	3,892	331	2,493	1,182	351	782	4,840
65 U. TN system	13,752	2,492	0	1,091	1,697	2,867	0	1,931	3,674
66 Dartmouth C.	13,636	0	0	0	884	3,429	1,359	0	7,964
67 U. Cincinnati all campuses	12,886	874	217	543	5,281	4,498	763	710	0
68 U. MO-Rolla	12,830	395	0	102	2,570	4,002	1,272	3,139	1,350
69 U. ND all campuses	12,547	0	0	113	249	19	109	0	12,057
70 Naval Postgraduate School	11,804 i	3,918 i	0 i	0 i	0 i	4,827 i	2,373 i	686 i	0
Total, 1st 70 institutions	2,608,852	203,793	145,862	161,898	220,724	684,349	407,605	210,796	573,825
71 FL International U.	11,682	0	350	0	584	819	467	0	9,462
72 MI Technological U.	11,640	0	110	531	3,583	482	3,522	2,312	1,100
73 FL State U.	11,082	0	0	127	611	1,730	8,545	0	69
74 WA State U.	11,037	0	1,638	778	1,610	1,673	1,873	3,076	389
75 U. IA	10,927	0	501	1,125	3,150	1,897	1,882	0	2,372
76 George Washington U.	10,790	1,686	0	0	4,312	1,166	534	0	3,092
77 Old Dominion U.	9,884	2,866	0	0	352	5,082	795	0	789
78 U. Pittsburgh all campuses	9,572	0	1,600	2,849	427	972	518	2,666	540
79 OH U. all campuses	9,435	6,277	0	178	824	1,152	659	0	345
80 Northeastern U.	9,323	0	0	2,618	483	2,309	826	0	3,087
Total, 1st 80 institutions	2,714,224	214,622	150,061	170,104	236,660	701,631	427,226	218,850	595,070

See explanatory information and SOURCE at end of table.

TABLE B-49. Federally financed R&D expenditures in engineering subfields at universities and colleges: fiscal year 2002

(Dollars in thousands)

Institution and ranking	Total	Aero/ astro- nautical	Bioengin- eering/ Biomed- ical	Chemical	Civil	Elec- trical	Mechanical	Metal- lurgical and materials	Other
81 Lehigh U.	9,223	0	0	705	1,868	1,484	1,360	2,984	822
82 SUNY Stony Brook all campuses	9,177	0	1,127	0	0	2,231	1,428	4,323	68
83 Brown U.	8,957	635 i	0 i	688 i	707 i	2,353 i	1,735 i	0 i	2,839
84 U. Houston	8,688	1,982	0	1,611	470	2,264	790	1,336	235
85 Rice U.	8,522	0	1,797	701	1,354	3,514	847	0	309
86 George Mason U.	8,415	0	0	0	475	1,701	0	0	6,239
87 U. KS all campuses	8,331	815	0	1,701	1,856	3,741	190	28	0
88 U. CA Irvine	8,227	0	796	1,877	1,089	2,795	1,661	0	9
89 U. South FL	8,110	0	0	526	3,210	3,189	1,124	61	0
90 U. ID	7,873	98	375	60	1,024	1,189	1,448	2,210	1,469
Total, 1st 90 institutions	2,799,747	218,152	154,156	177,973	248,713	726,092	437,809	229,792	607,060
91 MI State U.	7,866	0	0	1,836	1,058	1,799	2,485	0	688
92 U. NV, Reno	7,791	0	0	6	5,160	780	307	1,405	133
93 U. MA Amherst	7,766	0	0	1,575	284	3,920	1,918	0	69
94 OK State U. all campuses	7,681	150	0	499	312	780	871	0	5,069
95 U. NH	7,667	0	0	374	3,019	1,980	1,019	1,275	0
96 U. of Notre Dame	7,630	1,769	0	1,007	1,928	2,926	0	0	0
97 U. CT all campuses	7,439	0	0	1,217	2,120	1,566	617	1,885	34
98 NC Agricultural and Technical State U.	7,307	0	0	590	1,602	2,098	2,217	0	800
99 NM Institute of Mining and Technology	7,286	0	0	2,507	0	106	0	221	4,452
100 Mercer U. all campuses	7,223	425	0	157	0	347	1,716	4,528	50
Total, 1st 100 institutions	2,875,403	220,496	154,156	187,741	264,196	742,394	448,959	239,106	618,355
Total, all other sampled institutions	341,899	25,095	15,125	40,802	43,743	75,009	58,369	23,082	60,674

[1] Johns Hopkins University includes the Applied Physics Laboratory.

e = estimated.
i = imputed.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-50. R&D expenditures in the physical sciences at universities and colleges, ranked by fiscal year 2002 R&D expenditures in the physical sciences: fiscal years 1999--2002 and by subfield for 2002

(Dollars in thousands)

Institution and ranking	1999	2000	2001	2002	2002, by subfield			
					Astronomy	Chemistry	Physics	Other
Total, all institutions	2,604,923	2,711,061	2,804,939	3,008,466	402,057	1,128,600	1,282,092	195,717
1 Johns Hopkins U., The [1]	121,817	97,484	111,414	115,899	40,630	10,512	58,558	6,199
2 CA Institute of Technology	108,136	117,689	107,479	107,140	32,109	15,590	59,403	38
3 MA Institute of Technology	92,189	92,198	92,608	99,254	16,017	18,352	60,509	4,376
4 U. MD College Park	53,959	53,718	47,085	81,315	44,877	8,480	18,175	9,783
5 U. CA Berkeley	93,676	90,306	79,469	78,918	7,984	21,787	47,182	1,965
6 U. AZ	83,227	83,227	72,131	77,860	62,844	9,253	5,763	0
7 U. TX Austin	65,875	56,338	58,845	73,665	10,417	22,782	38,683	1,783
8 U. CA Los Angeles	41,873	45,035	68,170	68,211	14,624	17,758	35,062	767
9 Cornell U. all campuses	79,447	70,153	61,239	66,273	12,253	13,340	34,326	6,354
10 Stanford U.	54,521	53,594	54,140	63,387	0	17,856	5,423	40,108
Total, 1st 10 institutions	794,720	759,742	752,580	831,922	241,755	155,710	363,084	71,373
11 U. CO all campuses	48,157	72,003	71,362	58,379	25,002	15,623	15,999	1,755
12 PA State U. all campuses	37,420	42,461	55,196	56,959	15,862	17,070	24,027	0
13 U. WI Madison	41,526	46,678	49,127	50,449	6,312	15,214	22,052	6,871
14 FL State U.	41,417	43,626	42,586	49,388	0	13,709	35,655	24
15 U. IL Urbana-Champaign	48,846	48,612	47,013	48,218	5,461	20,962	21,795	0
16 MI State U.	31,712	39,788	45,432	47,401	0	14,142	33,259	0
17 U. CA San Diego	36,154	33,652	33,185	38,999	5,669	14,593	16,067	2,670
18 Harvard U.	30,424	32,530	35,170	35,156	2,623	15,549	16,076	908
19 IN U. all campuses	25,926	29,682	34,958	34,095	605	13,737	19,699	54
20 U. Chicago	34,942	35,534	33,192	33,410	13,851	7,387	11,979	193
Total, 1st 20 institutions	1,171,244	1,184,308	1,199,801	1,284,376	317,140	303,696	579,692	83,848
21 Columbia U. in the City of New York	21,500	26,104	34,612	32,054	4,375	6,628	2,383	18,668
22 Rutgers The State U. NJ all campuses	22,632	23,768	26,867	31,423	0	16,891	14,532	0
23 U. CA Santa Cruz	22,600	23,844	31,117	31,335	18,817	6,274	6,243	1
24 TX A&M U. all campuses	28,733	24,131	25,848	29,238	0	18,587	9,224	1,427
25 U. FL	21,498	20,005	23,257	28,654	2,336	12,154	13,727	437
26 OH State U. all campuses	19,535	24,446	23,906	28,251	2,105	14,174	11,843	129
27 Princeton U.	28,018	27,100	29,244	28,122	3,716	11,316	13,090	0
28 U. WA	26,090	27,122	29,784	28,015	2,394	13,934	11,687	0
29 U. MI all campuses	21,915	23,407	25,654	27,653	1,353	11,623	14,264	413
30 U. CA San Francisco	0	12,332	13,845	27,262	0	27,256	6	0
Total, 1st 30 institutions	1,383,765	1,416,567	1,463,935	1,576,383	352,236	442,533	676,691	104,923
31 SUNY Stony Brook all campuses	24,363	24,797	25,283	27,071	1,329	8,203	17,539	0
32 U. MA Amherst	18,041	20,094	20,876	26,779	8,817	13,387	4,105	470
33 U. CA Santa Barbara	21,057	23,459	24,757	25,959	0	6,545	13,485	5,929
34 U. SC all campuses	12,078	12,921	16,499	24,054	0	12,358	4,774	6,922
35 Northwestern U.	18,142	20,408	22,674	23,694	0	13,776	5,419	4,499
36 U. PA	24,775	24,780	23,695	23,609	0	11,107	12,502	0
37 GA Institute of Technology all campuses	19,539	21,141	21,086	23,024	0	8,948	12,682	1,394
38 U. MN all campuses	17,382	24,475	35,028	22,614	1,859	9,372	11,383	0
39 U. HI Manoa	24,828	26,699	26,405	22,167	15,510	1,729	4,765	163
40 Purdue U. all campuses	21,007	20,095	20,461	21,672	0	13,553	8,119	0
Total, 1st 40 institutions	1,584,977	1,635,436	1,700,699	1,817,026	379,751	541,511	771,464	124,300

See explanatory information and SOURCE at end of table.

TABLE B-50. R&D expenditures in the physical sciences at universities and colleges, ranked by fiscal year 2002 R&D expenditures in the physical sciences: fiscal years 1999--2002 and by subfield for 2002

(Dollars in thousands)

Institution and ranking	1999	2000	2001	2002	2002, by subfield			
					Astronomy	Chemistry	Physics	Other
41 U. CA Davis	14,193	18,183	21,329	21,445	0	6,249	5,345	9,851
42 Yale U.	18,596	18,830	20,108	20,731	783	6,964	12,984	0
43 U. CA Irvine	17,328	16,519	17,693	20,286	0	9,949	10,337	0
44 NC State U.	15,759	20,814	25,574	20,267	0	8,829	10,489	949
45 LA State U. all campuses	16,153	17,479	17,231	19,668	0	11,104	8,483	81
46 U. NC Chapel Hill	15,851	17,580	17,161	18,616	0	13,446	5,170	0
47 Catholic U. America	7,987	6,628	12,790	18,565	0	1,335	4,293	12,937
48 U. IA	14,766	15,985	15,080	18,547	1,441	4,139	12,967	0
49 U. of Notre Dame	13,360	15,252	13,946	17,792	0	11,252	6,362	178
50 AZ State U. main campus	19,937	19,021	22,231	17,772	224	8,244	3,438	5,866
Total, 1st 50 institutions	1,738,907	1,801,727	1,883,842	2,010,715	382,199	623,022	851,332	154,162
51 U. OK all campuses	12,958	15,549	13,690	17,763	0	12,853	4,910	0
52 Duke U.	17,061	13,288	13,377	16,837	0	5,921	10,916	0
53 Wayne State U.	11,190	11,683	14,516	16,058	0	8,233	7,825	0
54 U. UT	13,983	15,453	14,605	15,847	0	10,349	5,391	107
55 Boston U.	11,945	12,569	13,499	15,800	1,493	3,059	4,780	6,468
56 U. Central FL	10,970	13,656	16,754	15,645	0	1,885	13,760	0
57 U. MS all campuses	4,411	10,177	13,400	15,159	0	826	14,333	0
58 Rice U.	10,698	11,909	12,701	14,885	1,410	9,273	4,202	0
59 U. VA all campuses	11,938	12,397	11,538	14,173	1,425	7,535	5,213	0
60 U. Pittsburgh all campuses	10,668	11,914	13,139	13,707	1,047	7,668	4,992	0
Total, 1st 60 institutions	1,854,729	1,930,322	2,021,061	2,166,589	387,574	690,624	927,654	160,737
61 SUNY Buffalo all campuses	10,338	9,790	9,189	13,633	0	10,407	3,181	45
62 U. DE	10,144	11,038	12,830	13,042	0	6,332	3,122	3,588
63 U. IL Chicago	8,317	8,186	9,107	12,918	0	6,335	6,583	0
64 VA Polytechnic Institute & State U.	8,030	10,223	9,298	12,830	0	9,524	2,708	598
65 MT State U.-Bozeman	7,279	10,712	11,799	12,798	0	5,521	7,277	0
66 U. Rochester	13,049	13,461	12,860	12,725	1,731	3,319	7,675	0
67 Washington U. St. Louis	10,457	10,535	12,940	12,556	0	5,993	6,563	0
68 U. AL Huntsville, The	8,624	8,185	9,769	12,474	0	6,882	5,592	0
69 U. NE Lincoln	10,463	10,888	9,965	12,230	0	5,407	6,823	0
70 U. AR main campus	3,955	5,560	7,002	11,336	0	6,945	4,391	0
Total, 1st 70 institutions	1,945,385	2,028,900	2,125,820	2,293,131	389,305	757,289	981,569	164,968
71 Carnegie-Mellon U.	8,586	7,942	9,311	11,263	0	4,326	6,344	593
72 U. GA	9,866	10,068	10,870	11,145	0	6,735	4,410	0
73 KS State U.	7,916	8,062	9,957	11,131	0	2,932	8,199	0
74 Vanderbilt U.	14,698	12,865	9,903	10,688	0	4,355	6,333	0
75 CO State U.	8,514	8,469	8,564	10,549	0	7,508	2,625	416
76 U. TN system	12,404	10,933	9,579	10,403	0	3,998	6,405	0
77 U. Akron all campuses	6,820	8,279	8,178	10,236	0	10,091	145	0
78 NM State U. all campuses	4,572	4,574	5,851	10,224	1,074	5,591	2,135	1,424
79 IA State U.	9,105	9,232	10,536	10,218	0	7,307	2,911	0
80 Brown U.	8,027	8,806	9,546	9,427	0 i	4,272 i	5,155 i	0 i
Total, 1st 80 institutions	2,035,893	2,118,130	2,218,115	2,398,415	390,379	814,404	1,026,231	167,401

See explanatory information and SOURCE at end of table.

TABLE B-50. R&D expenditures in the physical sciences at universities and colleges, ranked by fiscal year 2002 R&D expenditures in the physical sciences: fiscal years 1999--2002 and by subfield for 2002

(Dollars in thousands)

Institution and ranking	1999	2000	2001	2002	2002, by subfield			
					Astronomy	Chemistry	Physics	Other
81 Northeastern U.	6,722	12,507	9,696	8,969	0	3,077	5,892	0
82 U. OR	7,728	7,267	7,911	8,693	0	4,279	4,414	0
83 Emory U.	6,304	8,355	9,394	8,673	0	7,526	1,147	0
84 TX Tech U.	6,401	5,230	6,028	8,644	0	5,708	2,936	0
85 U. Southern CA	10,415	10,177	10,030	8,448	211	6,859	1,378	0
86 Boston C.	6,377	7,638	7,802	8,421	0	6,223	2,198	0
87 Clemson U.	6,049	6,996	8,047	8,333	0	4,786	3,547	0
88 U. NM all campuses	8,679	11,000	6,611	8,165	0	2,313	5,424	428
89 IL Institute of Technology	1,826	1,203	1,139	8,041	0	552	7,489	0
90 U. KS all campuses	11,388	10,207	6,269	7,768	280	3,420	4,068	0
Total, 1st 90 institutions	2,107,782	2,198,710	2,291,042	2,482,570	390,870	859,147	1,064,724	167,829
91 U. KY all campuses	5,623	8,068	7,709	7,767	0	4,391	3,376	0
92 U. CT all campuses	4,671	7,097	7,174	7,665	0	3,698	3,967	0
93 C. of William and Mary all campuses	4,525	5,126	5,728	7,603	0	815	4,469	2,319
94 U. CA Riverside	6,883	7,627	7,168	7,524	0	4,900	2,334	290
95 Kent State U. all campuses	6,844	6,620	6,971	7,328	0	1,646	1,931	3,751
96 Hampton U.	5,463	3,826	7,300	7,147	0	227	6,920	0
97 Temple U.	2,303	4,676	6,979	7,033	0	1,085	5,948	0
98 U. Southern MS	4,070	4,113	4,914	6,824	0	6,506	318	0
99 CO School of Mines	4,199	6,318	5,693	6,789	0	1,289	5,500	0
100 Case Western Reserve U.	6,525	6,496	6,025	6,600	301	3,445	2,854	0
Total, 1st 100 institutions	2,158,888	2,258,677	2,356,703	2,554,850	391,171	887,149	1,102,341	174,189
Total, all other sampled institutions	446,035	452,384	448,236	453,616	10,886	241,451	179,751	21,528

[1] Johns Hopkins University includes the Applied Physics Laboratory

e = estimated.
i = imputed.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-51. Federally financed R&D expenditures in the physical sciences at universities and colleges, ranked by fiscal year 2002
federally financed R&D expenditures in the physical sciences: fiscal years 1999--2002 and by subfield for 2002

(Dollars in thousands)

Institution and ranking	1999	2000	2001	2002	2002, by subfield			
					Astronomy	Chemistry	Physics	Other
Total, all institutions	1,861,046	1,912,659	1,973,662	2,124,143	277,380	737,272	970,813	138,678
1 Johns Hopkins U., The [1]	119,458	95,181	109,309	114,292	39,975	10,090	58,028	6,199
2 CA Institute of Technology	103,926	111,480	103,362	102,970	31,760	12,135	59,051	24
3 MA Institute of Technology	89,506	89,453	89,881	96,224	15,980	16,357	59,772	4,115
4 U. MD College Park	32,933	34,162	32,982	57,640	31,989	6,624	14,512	4,515
5 Stanford U.	49,719	48,464	48,502	56,406	0	14,844	5,042	36,520
6 U. CA Berkeley	55,380	53,882	52,604	54,879	4,165	15,867	34,841	6
7 U. CO all campuses	35,611	64,056	64,575	52,783	23,344	13,602	14,484	1,353
8 U. TX Austin	48,402	41,510	42,500	52,700	4,167	14,104	34,366	63
9 Cornell U. all campuses	64,965	53,842	44,655	44,674	4,010	8,944	27,487	4,233
10 U. AZ	53,756	50,078	40,321	42,685	31,073	6,853	4,759	0
Total, 1st 10 institutions	653,656	642,108	628,691	675,253	186,463	119,420	312,342	57,028
11 PA State U. all campuses	23,617	27,124	36,777	39,869	12,610	10,312	16,947	0
12 U. CA Los Angeles	27,925	29,115	31,178	33,954	0	13,074	20,880	0
13 U. WI Madison	28,915	31,742	32,878	32,913	2,830	8,053	17,726	4,304
14 Harvard U.	29,956	29,920	31,346	32,752	2,594	13,637	15,613	908
15 Columbia U. in the City of New York	20,581	25,462	33,143	31,122	4,356	6,145	1,993	18,628
16 U. IL Urbana-Champaign	32,938	33,653	30,747	30,780	3,637	12,266	14,877	0
17 U. CA San Diego	27,724	25,391	25,428	28,434	3,678	11,311	11,711	1,734
18 U. Chicago	32,554	31,905	27,664	27,553	13,687	6,020	7,674	172
19 MI State U.	20,998	25,026	28,919	27,149	0	6,186	20,963	0
20 FL State U.	22,962	21,881	19,716	24,809	0	4,015	20,794	0
Total, 1st 20 institutions	921,826	923,327	926,487	984,588	229,855	210,439	461,520	82,774
21 U. MI all campuses	17,108	18,693	20,839	21,585	1,006	9,041	11,277	261
22 U. PA	22,655	22,163	21,681	21,498	0	10,158	11,340	0
23 U. CA San Francisco	0	9,033	11,198	20,915	0	20,915	0	0
24 Princeton U.	20,381	18,039	18,987	20,523	2,134	7,920	10,469	0
25 U. WA	19,299	20,168	20,482	20,100	1,187	8,656	10,257	0
26 U. CA Santa Barbara	16,479	17,170	19,170	19,037	0	5,031	9,530	4,476
27 U. MN all campuses	14,357	18,442	26,233	18,529	1,538	6,866	10,125	0
28 SUNY Stony Brook all campuses	16,514	16,751	16,748	17,782	1,073	5,735	10,974	0
29 U. FL	13,638	12,162	14,377	17,554	1,094	7,901	8,499	60
30 Yale U.	16,174	15,835	17,867	17,511	524	5,199	11,788	0
Total, 1st 30 institutions	1,078,431	1,091,783	1,114,069	1,179,622	238,411	297,861	555,779	87,571
31 IN U. all campuses	17,701	17,177	17,231	17,371	99	5,584	11,672	16
32 U. HI Manoa	12,752	14,039	13,645	16,740	10,639	1,300	4,677	124
33 Rutgers The State U. NJ all campuses	12,310	12,579	13,166	16,334	0	11,031	5,303	0
34 Northwestern U.	12,193	14,565	15,507	15,577	0	10,134	3,321	2,122
35 OH State U. all campuses	11,827	12,728	13,936	15,518	1,064	7,691	6,763	0
36 Catholic U. America	7,042	5,737	10,453	15,129	0	961	3,526	10,642
37 U. of Notre Dame	11,755	13,117	12,814	14,777	0	8,886	5,891	0
38 Boston U.	11,472	12,004	12,961	14,626	1,103	2,904	4,696	5,923
39 U. IA	11,564	12,384	12,700	14,509	1,185	2,655	10,669	0
40 U. MA Amherst	9,026	10,292	11,495	14,493	5,449	7,103	1,941	0
Total, 1st 40 institutions	1,196,073	1,216,405	1,247,977	1,334,696	257,950	356,110	614,238	106,398

See explanatory information and SOURCE at end of table.

TABLE B-51. Federally financed R&D expenditures in the physical sciences at universities and colleges, ranked by fiscal year 2002
federally financed R&D expenditures in the physical sciences: fiscal years 1999--2002 and by subfield for 2002

(Dollars in thousands)

Institution and ranking	1999	2000	2001	2002	2002, by subfield			
					Astronomy	Chemistry	Physics	Other
41 Purdue U. all campuses	13,162	12,804	13,134	14,492	0	8,496	5,996	0
42 TX A&M U. all campuses	11,842	11,732	11,292	14,199	0	8,450	5,407	342
43 U. CA Irvine	12,187	11,410	12,331	14,134	0	7,196	6,938	0
44 U. CA Davis	9,574	12,936	14,233	13,923	0	4,783	3,216	5,924
45 U. NC Chapel Hill	12,453	13,796	13,755	13,325	0	9,294	4,031	0
46 U. MS all campuses	3,859	9,574	11,879	13,259	0	724	12,535	0
47 Duke U.	14,936	11,171	10,799	13,054	0	3,276	9,778	0
48 U. CA Santa Cruz	8,250	9,449	11,894	12,816	4,885	4,464	3,467	0
49 U. VA all campuses	10,575	10,236	9,901	12,595	1,333	6,498	4,764	0
50 Rice U.	8,674	9,784	10,359	12,398	1,221	7,469	3,708	0
Total, 1st 50 institutions	1,301,585	1,329,297	1,367,554	1,468,891	265,389	416,760	674,078	112,664
51 LA State U. all campuses	9,094	9,796	10,861	12,330	0	7,005	5,274	51
52 U. Pittsburgh all campuses	9,009	10,273	11,341	12,023	997	6,628	4,398	0
53 U. UT	12,515	10,264	10,502	11,745	0	7,186	4,559	0
54 GA Institute of Technology all campuses	8,362	8,759	9,894	11,207	0	4,356	6,173	678
55 U. Rochester	12,076	12,455	11,298	11,199	1,586	2,636	6,977	0
56 Washington U. St. Louis	7,644	7,848	9,644	9,951	0	4,470	5,481	0
57 MT State U.-Bozeman	5,718	8,079	9,532	9,776	0	4,129	5,647	0
58 U. OK all campuses	6,383	8,894	7,654	9,501	0	6,871	2,630	0
59 KS State U.	6,181	6,605	8,358	9,489	0	2,419	7,070	0
60 U. AL Huntsville, The	6,235	5,626	7,157	9,413	0	4,943	4,470	0
Total, 1st 60 institutions	1,384,802	1,417,896	1,463,795	1,575,525	267,972	467,403	726,757	113,393
61 Vanderbilt U.	13,027	10,673	8,305	9,158	0	3,632	5,526	0
62 U. SC all campuses	7,007	8,076	8,495	9,103	0	5,557	3,239	307
63 U. DE	7,113	7,945	9,118	8,939	0	4,050	2,044	2,845
64 NM State U. all campuses	3,838	3,556	5,255	8,846	938	4,890	1,804	1,214
65 AZ State U. main campus	9,978	9,177	9,700	8,831	0	4,401	2,696	1,734
66 Carnegie-Mellon U.	5,804	6,276	7,251	8,627	0	3,086	4,948	593
67 Wayne State U.	4,399	5,114	7,453	8,511	0	4,457	4,054	0
68 U. AR main campus	2,288	2,858	4,702	8,081	0	5,483	2,598	0
69 U. TN system	7,641	6,445	7,486	7,991	0	2,852	5,139	0
70 U. IL Chicago	4,801	5,412	5,972	7,768	0	3,460	4,308	0
Total, 1st 70 institutions	1,450,698	1,483,428	1,537,532	1,661,380	268,910	509,271	763,113	120,086
71 SUNY Buffalo all campuses	5,312	4,448	4,109	7,497	0	5,243	2,254	0
72 CO State U.	6,706	6,338	6,900	7,483	0	5,705	1,552	226
73 U. NE Lincoln	5,508	5,504	6,021	7,432	0	2,971	4,461	0
74 U. NM all campuses	7,562	8,668	5,570	7,285	0	1,879	5,015	391
75 U. OR	6,503	6,075	6,766	7,214	0	3,283	3,931	0
76 U. Central FL	3,884	3,106	5,363	7,160	0	1,581	5,579	0
77 NC State U.	6,258	9,498	12,176	7,077	0	3,014	3,556	507
78 Boston C.	4,708	5,424	5,725	6,743	0	5,074	1,669	0
79 VA Polytechnic Institute & State U.	4,607	4,766	4,135	6,545	0	4,577	1,495	473
80 Temple U.	1,264	4,072	6,384	6,285	0	858	5,427	0
Total, 1st 80 institutions	1,503,010	1,541,327	1,600,681	1,732,101	268,910	543,456	798,052	121,683

See explanatory information and SOURCE at end of table.

TABLE B-51. Federally financed R&D expenditures in the physical sciences at universities and colleges, ranked by fiscal year 2002 federally financed R&D expenditures in the physical sciences: fiscal years 1999--2002 and by subfield for 2002

(Dollars in thousands)

Institution and ranking	1999	2000	2001	2002	2002, by subfield			
					Astronomy	Chemistry	Physics	Other
81 Hampton U.	5,159	3,547	6,609	6,248	0	199	6,049	0
82 Northeastern U.	5,036	11,091	7,318	6,089	0	1,711	4,378	0
83 Case Western Reserve U.	5,413	4,297	5,361	6,022	301	3,012	2,709	0
84 U. Southern CA	8,099	7,862	6,910	5,870	201	4,484	1,185	0
85 NY U.	4,288	3,897	4,165	5,822	0	3,346	2,476	0
86 CO School of Mines	3,430	5,842	5,026	5,816	0	775	5,041	0
87 IA State U.	4,528	4,714	5,811	5,754	0	3,508	2,246	0
88 U. CA Riverside	4,966	5,578	5,088	5,467	0	3,379	2,087	1
89 C. of William and Mary all campuses	2,969	3,140	3,380	5,458	0	303	4,095	1,060
90 Kent State U. all campuses	5,414	4,643	5,160	5,376	0	1,274	1,404	2,698
Total, 1st 90 institutions	1,552,312	1,595,938	1,655,509	1,790,023	269,412	565,447	829,722	125,442
91 Emory U.	4,845	5,658	6,350	5,365	0	4,615	750	0
92 U. MA Lowell	4,108	3,742	4,066	5,343	0	2,545	2,798	0
93 CUNY City C.	5,538	4,995	4,955	5,245	0	2,533	2,255	457
94 U. MD Baltimore County	2,066	3,227	4,990	5,129	0	3,112	2,017	0
95 Brown U.	4,179	4,771	5,136	5,126	0 i	2,153 i	2,973 i	0 i
96 U. NV, Reno	3,774	4,659	4,344	4,997	85	798	3,520	594
97 U. KS all campuses	5,693	6,345	2,736	4,970	276	1,864	2,830	0
98 U. Southern MS	2,832	3,014	3,620	4,915	0	4,597	318	0
99 WA State U.	4,258	4,090	4,589	4,690	0	2,702	1,987	1
100 Clemson U.	1,648	1,906	4,363	4,629	0	2,296	2,333	0
Total, 1st 100 institutions	1,591,253	1,638,345	1,700,658	1,840,432	269,773	592,662	851,503	126,494
Total, all other sampled institutions	269,793	274,314	273,004	283,711	7,607	144,610	119,310	12,184

[1] Johns Hopkins University includes the Applied Physics Laboratory.

e = estimated.
i = imputed.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-52. Total and federally financed R&D expenditures in chemistry at universities and colleges, ranked by fiscal year 2002 total R&D expenditures in chemistry: fiscal years 1999--2002

(Dollars in thousands)

Institution and ranking	Total				Federally financed			
	1999	2000	2001	2002	1999	2000	2001	2002
Total, all institutions	919,018	961,168	1,009,187	1,128,600	616,442	630,049	661,223	737,272
1 U. CA San Francisco	0	12,332	13,845	27,256	0	9,033	11,198	20,915
2 U. TX Austin	11,159	10,142	11,640	22,782	6,547	5,749	5,163	14,104
3 U. CA Berkeley	21,071	21,471	21,339	21,787	14,195	15,774	14,617	15,867
4 U. IL Urbana-Champaign	19,426	17,667	20,091	20,962	11,621	10,294	12,239	12,266
5 TX A&M U. all campuses	17,576	15,385	17,206	18,587	5,571	6,986	6,629	8,450
6 MA Institute of Technology	17,050	18,756	18,063	18,352	15,244	16,690	16,380	16,357
7 Stanford U.	11,835	12,947	15,752	17,856	9,778	10,973	13,425	14,844
8 U. CA Los Angeles	13,158	13,564	15,071	17,758	10,604	10,432	11,339	13,074
9 PA State U. all campuses	15,962	16,075	18,042	17,070	9,727	9,797	10,201	10,312
10 Rutgers The State U. NJ all campuses	11,543	12,351	13,190	16,891	7,673	8,071	7,972	11,031
Total, 1st 10 institutions	138,780	150,690	164,239	199,301	90,960	103,799	109,163	137,220
11 U. CO all campuses	11,889	12,251	14,229	15,623	9,618	10,281	12,242	13,602
12 CA Institute of Technology	16,310	15,538	15,357	15,590	13,829	12,866	13,092	12,135
13 Harvard U.	14,112	16,957	17,446	15,549	13,890	14,788	14,166	13,637
14 U. WI Madison	13,196	14,758	12,935	15,214	8,287	8,094	7,301	8,053
15 U. CA San Diego	10,725	9,831	11,131	14,593	8,710	7,251	8,742	11,311
16 OH State U. all campuses	8,110	13,141	12,174	14,174	4,629	5,529	6,734	7,691
17 MI State U.	6,106	8,247	10,488	14,142	3,969	4,486	5,425	6,186
18 U. WA	8,100	9,167	9,597	13,934	5,578	6,493	6,437	8,656
19 Northwestern U.	10,471	11,373	13,733	13,776	8,126	8,865	10,383	10,134
20 IN U. all campuses	8,202	10,812	14,316	13,737	5,733	5,988	6,212	5,584
Total, 1st 20 institutions	246,001	272,765	295,645	345,633	173,329	188,440	199,897	234,209
21 FL State U.	9,395	11,631	11,635	13,709	4,536	4,229	3,873	4,015
22 Purdue U. all campuses	12,021	11,260	12,194	13,553	7,523	6,958	7,831	8,496
23 U. NC Chapel Hill	8,583	10,080	12,652	13,446	6,159	7,556	10,150	9,294
24 U. MA Amherst	10,269	11,267	10,509	13,387	4,921	5,667	5,467	7,103
25 Cornell U. all campuses	14,132	14,002	11,013	13,340	9,633	9,103	7,743	8,944
26 U. OK all campuses	10,225	12,512	10,574	12,853	4,817	7,377	6,025	6,871
27 U. SC all campuses	7,727	9,321	9,228	12,358	4,849	5,826	5,316	5,557
28 U. FL	11,034	10,070	11,359	12,154	7,682	6,088	7,180	7,901
29 U. MI all campuses	7,744	9,009	10,957	11,623	5,862	7,317	8,722	9,041
30 Princeton U.	9,477	9,850	11,314	11,316	6,092	6,068	6,291	7,920
Total, 1st 30 institutions	346,608	381,767	407,080	473,372	235,403	254,629	268,495	309,351
31 U. of Notre Dame	9,006	10,010	8,960	11,252	7,998	8,826	8,177	8,886
32 U. PA	10,994	12,886	11,110	11,107	10,624	11,992	10,112	10,158
33 LA State U. all campuses	8,350	8,543	8,632	11,104	5,085	5,254	5,828	7,005
34 Johns Hopkins U., The	18,297	12,616	12,124	10,512	17,961	12,217	11,681	10,090
35 SUNY Buffalo all campuses	7,347	6,852	5,711	10,407	4,045	3,403	2,194	5,243
36 U. UT	9,359	8,420	10,086	10,349	8,668	7,172	7,483	7,186
37 U. Akron all campuses	6,775	8,214	8,108	10,091	2,487	2,507	3,179	3,669
38 U. CA Irvine	10,036	9,683	9,863	9,949	7,289	6,979	7,180	7,196
39 VA Polytechnic Institute & State U.	6,257	7,724	6,461	9,524	3,271	3,435	2,621	4,577
40 U. MN all campuses	7,241	8,472	8,860	9,372	5,799	6,122	6,476	6,866
Total, 1st 40 institutions	440,270	475,187	496,995	577,039	308,630	322,536	333,426	380,227

See explanatory information and SOURCE at end of table.

TABLE B-52. Total and federally financed R&D expenditures in chemistry at universities and colleges, ranked by fiscal year 2002 total R&D expenditures in chemistry: fiscal years 1999--2002

(Dollars in thousands)

Institution and ranking	Total				Federally financed			
	1999	2000	2001	2002	1999	2000	2001	2002
41 Rice U.	5,516	6,605	7,390	9,273	3,892	4,856	5,627	7,469
42 U. AZ	8,524	9,699	9,908	9,253	6,396	7,265	7,336	6,853
43 GA Institute of Technology all campuses	8,919	9,962	9,027	8,948	3,817	4,127	4,236	4,356
44 NC State U.	4,372	7,813	11,143	8,829	1,998	4,016	5,427	3,014
45 U. MD College Park	8,330	6,197	7,242	8,480	4,580	5,060	5,825	6,624
46 AZ State U. main campus	8,782	8,979	12,416	8,244	4,035	4,304	5,237	4,401
47 Wayne State U.	5,841	5,760	6,874	8,233	3,489	3,984	4,053	4,457
48 SUNY Stony Brook all campuses	7,240	6,774	6,730	8,203	4,892	4,773	4,446	5,735
49 U. Pittsburgh all campuses	6,435	7,459	7,943	7,668	5,270	6,436	6,812	6,628
50 U. VA all campuses	6,715	7,697	6,583	7,535	5,774	5,892	5,328	6,498
Total, 1st 50 institutions	510,944	552,132	582,251	661,705	352,773	373,249	387,753	436,262
51 Emory U.	5,535	7,155	8,037	7,526	4,162	4,917	5,537	4,615
52 CO State U.	6,401	5,666	5,917	7,508	5,072	4,230	4,916	5,705
53 U. Chicago	9,484	8,676	9,403	7,387	8,349	6,519	5,643	6,020
54 IA State U.	5,023	5,139	5,503	7,307	2,158	2,272	2,860	3,508
55 Yale U.	7,329	6,888	6,751	6,964	5,914	5,369	5,854	5,199
56 U. AR main campus	2,117	2,517	3,273	6,945	1,299	1,536	2,134	5,483
57 U. AL Huntsville, The	1,708	1,837	5,413	6,882	1,015	1,023	3,665	4,943
58 U. Southern CA	7,545	7,551	8,010	6,859	5,758	5,762	5,187	4,484
59 U. GA	6,266	6,560	6,977	6,735	1,691	1,736	2,087	2,077
60 Columbia U. in the City of New York	7,377	7,072	7,983	6,628	6,899	6,747	7,306	6,145
Total, 1st 60 institutions	569,729	611,193	649,518	732,446	395,090	413,360	432,942	484,441
61 U. CA Santa Barbara	6,997	7,056	6,656	6,545	5,364	4,946	4,657	5,031
62 U. Southern MS	3,902	3,960	4,741	6,506	2,667	2,861	3,447	4,597
63 U. IL Chicago	3,770	4,075	4,023	6,335	2,064	2,765	2,793	3,460
64 U. DE	4,711	5,418	6,043	6,332	2,735	3,576	4,023	4,050
65 U. CA Santa Cruz	4,793	5,610	5,838	6,274	3,133	3,557	3,852	4,464
66 U. CA Davis	5,010	5,972	6,771	6,249	4,196	4,752	5,645	4,783
67 Boston C.	5,549	5,230	5,843	6,223	4,120	3,914	4,331	5,074
68 Washington U. St. Louis	5,323	4,975	5,035	5,993	3,921	3,643	3,826	4,470
69 Duke U.	3,851	4,210	4,417	5,921	2,187	2,403	2,619	3,276
70 TX Tech U.	4,483	3,208	4,150	5,708	1,781	732	1,129	1,290
Total, 1st 70 institutions	618,118	660,907	703,035	794,532	427,258	446,509	469,264	524,936
71 NM State U. all campuses	1,410	1,732	2,826	5,591	1,194	1,275	2,732	4,890
72 MT State U.-Bozeman	3,180	4,331	4,542	5,521	2,507	2,869	3,632	4,129
73 U. NE Lincoln	6,005	6,062	5,475	5,407	3,387	3,397	3,480	2,971
74 U. CA Riverside	4,028	4,422	4,859	4,900	2,810	3,053	3,104	3,379
75 Clemson U.	3,294	3,777	3,933	4,786	897	1,029	1,835	2,296
76 VA Commonwealth U.	3,604	5,338	5,269	4,571	1,928	2,936	3,466	2,665
77 ND State U. all campuses	4,414	3,467	2,894	4,492	3,249	2,606	2,008	3,468
78 U. KY all campuses	2,760	4,787	4,121	4,391	1,574	3,159	3,249	2,174
79 Vanderbilt U.	2,873	3,227	3,171	4,355	2,499	2,910	2,717	3,632
80 Carnegie-Mellon U.	3,220	2,033	2,867	4,326	2,014	1,622	2,341	3,086
Total, 1st 80 institutions	652,906	700,083	742,992	842,872	449,317	471,365	497,828	557,626

See explanatory information and SOURCE at end of table.

TABLE B-52. Total and federally financed R&D expenditures in chemistry at universities and colleges, ranked by fiscal year 2002 total R&D expenditures in chemistry: fiscal years 1999--2002

(Dollars in thousands)

Institution and ranking	Total				Federally financed			
	1999	2000	2001	2002	1999	2000	2001	2002
81 U. OR	3,071	3,265	3,969	4,279	2,566	2,614	3,256	3,283
82 Brown U.	3,638	4,140	4,330	4,272 i	1,909	2,290	2,158	2,153 i
83 MS State U.	2,289	4,643	4,550	4,147	1,238	1,179	1,411	1,202
84 U. IA	3,505	3,560	3,820	4,139	2,361	2,232	2,427	2,655
85 U. Houston	5,891	5,411	6,074	4,121	3,077	2,437	2,889	2,080
86 WA State U.	2,660	2,466	3,048	4,005	2,209	2,013	2,245	2,702
87 U. TN system	4,333	3,660	3,044	3,998	2,764	2,137	2,467	2,852
88 CUNY Hunter C.	3,469	3,344	4,101	3,943	2,164	2,267	2,682	2,959
89 Georgetown U.	5,176e	4,569	4,870	3,834	4,137	3,634	4,515	2,887
90 U. MD Baltimore County	1,979	2,237	3,280	3,760	1,307	1,954	3,012	3,112
Total, 1st 90 institutions	688,917	737,378	784,078	883,370	473,049	494,122	524,890	583,511
91 U. CT all campuses	2,155	3,689	3,666	3,698	1,044	1,836	1,696	2,164
92 U. AL, The	1,815	2,141	2,841	3,668	1,237	1,361	1,884	2,566
93 OR State U.	4,860	4,812	3,895	3,653	4,206	3,919	3,213	2,839
94 NY U.	4,112	2,838	2,456	3,637	2,741	2,068	2,168	3,346
95 Rensselaer Polytechnic Institute	2,931	3,035	1,740	3,495	2,317	2,511	1,439	2,174
96 Southwest TX State U.	1,548	2,475	3,786	3,459 i	753	2,097	2,579	2,453 i
97 Case Western Reserve U.	4,379	4,494	3,489	3,445	3,661	2,700	2,985	3,012
98 U. KS all campuses	8,800	7,134	3,099	3,420	4,335	4,725	1,142	1,864
99 U. MO-Columbia	3,083	3,133	3,356	3,371	1,448	1,228	1,426	1,822
100 U. Rochester	5,405	4,097	3,246	3,319	4,901	3,493	2,691	2,636
Total, 1st 100 institutions	728,005	775,226	815,652	918,535	499,692	520,060	546,113	608,387
Total, all other sampled institutions	191,013	185,942	193,535	210,065	116,750	109,989	115,110	128,885

e = estimated.
i = imputed.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-53. Total and federally financed R&D expenditures in physics at universities and colleges, ranked by fiscal year 2002 total R&D expenditures in physics: fiscal years 1999--2002

(Dollars in thousands)

Institution and ranking	Total				Federally financed			
	1999	2000	2001	2002	1999	2000	2001	2002
Total, all institutions	1,149,109	1,207,024	1,239,675	1,282,092	867,445	900,671	926,721	970,813
1 MA Institute of Technology	55,054	56,131	58,449	60,509	54,205	55,491	57,628	59,772
2 CA Institute of Technology	45,343	61,073	58,873	59,403	44,186	57,536	57,498	59,051
3 Johns Hopkins U., The	65,247	50,215	52,412	58,558	64,556	49,549	51,802	58,028
4 U. CA Berkeley	53,113	49,397	48,272	47,182	37,628	34,223	34,352	34,841
5 U. TX Austin	44,967	36,507	37,520	38,683	37,271	31,781	33,578	34,366
6 FL State U.	31,861	31,797	30,696	35,655	18,284	17,463	15,597	20,794
7 U. CA Los Angeles	25,023	27,683	32,337	35,062	16,193	17,389	19,839	20,880
8 Cornell U. all campuses	38,721	37,188	34,050	34,326	33,610	30,174	29,203	27,487
9 MI State U.	25,606	31,541	34,944	33,259	17,029	20,540	23,494	20,963
10 PA State U. all campuses	15,964	18,668	21,380	24,027	11,165	13,234	13,571	16,947
Total, 1st 10 institutions	400,899	400,200	408,933	426,664	334,127	327,380	336,562	353,129
11 U. WI Madison	18,187	21,817	22,952	22,052	14,600	16,927	17,960	17,726
12 U. IL Urbana-Champaign	23,569	24,871	21,004	21,795	17,628	19,253	14,586	14,877
13 IN U. all campuses	17,050	18,017	19,987	19,699	11,674	10,922	10,820	11,672
14 U. MD College Park	26,869	24,791	18,202	18,175	16,990	16,989	13,938	14,512
15 SUNY Stony Brook all campuses	15,406	16,515	17,331	17,539	10,555	10,844	11,335	10,974
16 Harvard U.	10,456	10,173	12,745	16,076	10,314	9,823	12,225	15,613
17 U. CA San Diego	14,206	13,057	13,566	16,067	10,920	9,776	10,310	11,711
18 U. CO all campuses	10,396	17,121	14,088	15,999	8,855	15,265	12,725	14,484
19 Rutgers The State U. NJ all campuses	11,089	11,417	13,677	14,532	4,637	4,508	5,194	5,303
20 U. MS all campuses	3,896	9,505	12,706	14,333	3,477	9,025	11,279	12,535
Total, 1st 20 institutions	552,023	567,484	575,191	602,931	443,777	450,712	456,934	482,536
21 U. MI all campuses	11,706	11,496	13,013	14,264	10,093	10,070	10,959	11,277
22 U. Central FL	9,554	9,510	13,040	13,760	3,148	2,282	4,129	5,579
23 U. FL	8,275	7,652	9,209	13,727	4,801	4,673	5,767	8,499
24 U. CA Santa Barbara	14,060	16,394	12,191	13,485	11,115	12,215	9,260	9,530
25 Princeton U.	14,923	13,369	14,002	13,090	12,566	10,546	11,172	10,469
26 Yale U.	10,474	10,994	12,335	12,984	9,736	9,936	11,121	11,788
27 U. IA	10,135	11,282	10,259	12,967	8,282	9,137	9,272	10,669
28 GA Institute of Technology all campuses	10,620	11,179	11,843	12,682	4,545	4,632	5,557	6,173
29 U. PA	13,781	11,894	12,585	12,502	12,031	10,171	11,569	11,340
30 U. Chicago	8,940	10,447	8,821	11,979	8,352	9,875	8,270	7,674
Total, 1st 30 institutions	664,491	681,701	692,489	734,371	528,446	534,249	544,010	575,534
31 OH State U. all campuses	9,932	9,549	10,086	11,843	6,237	6,032	6,166	6,763
32 U. WA	13,549	15,090	16,869	11,687	11,497	12,365	12,395	10,257
33 U. MN all campuses	7,625	13,407	24,214	11,383	6,493	10,068	18,143	10,125
34 Duke U.	13,210	9,078	8,960	10,916	12,749	8,768	8,180	9,778
35 NC State U.	11,387	11,036	14,006	10,489	4,260	5,481	6,411	3,556
36 U. CA Irvine	7,240	6,800	7,830	10,337	4,898	4,431	5,151	6,938
37 TX A&M U. all campuses	8,683	7,568	7,363	9,224	5,301	4,255	4,360	5,407
38 LA State U. all campuses	6,982	8,929	8,237	8,483	4,009	4,542	5,033	5,274
39 KS State U.	5,395	5,717	7,396	8,199	4,311	4,953	6,502	7,070
40 Purdue U. all campuses	8,986	8,835	8,267	8,119	5,639	5,846	5,303	5,996
Total, 1st 40 institutions	757,480	777,710	805,717	835,051	593,840	600,990	621,654	646,698

See explanatory information and SOURCE at end of table.

TABLE B-53. Total and federally financed R&D expenditures in physics at universities and colleges, ranked by fiscal year 2002 total R&D expenditures in physics: fiscal years 1999--2002

(Dollars in thousands)

Institution and ranking	Total				Federally financed			
	1999	2000	2001	2002	1999	2000	2001	2002
41 Wayne State U.	5,349	5,923	7,642	7,825	910	1,130	3,400	4,054
42 U. Rochester	6,723	7,820	8,395	7,675	6,289	7,474	7,492	6,977
43 IL Institute of Technology	1,532	939	940	7,489	630	756	634	2,312
44 MT State U.-Bozeman	4,099	6,381	7,257	7,277	3,211	5,210	5,900	5,647
45 Hampton U.	5,313	3,637	7,115	6,920	5,009	3,358	6,424	6,049
46 U. NE Lincoln	4,458	4,826	4,490	6,823	2,121	2,107	2,541	4,461
47 U. IL Chicago	4,547	4,111	5,084	6,583	2,737	2,647	3,179	4,308
48 Washington U. St. Louis	5,134	5,560	7,905	6,563	3,723	4,205	5,818	5,481
49 U. TN system	8,071	7,273	6,535	6,405	4,877	4,308	5,019	5,139
50 U. of Notre Dame	4,354	5,242	4,986	6,362	3,757	4,291	4,637	5,891
Total, 1st 50 institutions	807,060	829,422	866,066	904,973	627,104	636,476	666,698	697,017
51 Carnegie-Mellon U.	4,871	5,041	5,646	6,344	3,725	4,342	4,910	4,948
52 Vanderbilt U.	11,825	9,638	6,732	6,333	10,528	7,763	5,588	5,526
53 U. CA Santa Cruz	5,326	5,226	8,501	6,243	3,235	3,458	3,527	3,467
54 Temple U.	1,112	3,702	6,012	5,948	650	3,219	5,598	5,427
55 Northeastern U.	4,156	9,463	7,019	5,892	3,149	8,685	5,467	4,378
56 U. AZ	4,280	5,368	4,619	5,763	3,233	4,364	3,693	4,759
57 U. AL Huntsville, The	6,916	6,348	4,356	5,592	5,220	4,603	3,492	4,470
58 CO School of Mines	3,348	5,265	4,918	5,500	2,979	4,946	4,530	5,041
59 U. NM all campuses	5,448	8,172	3,492	5,424	5,085	6,459	3,174	5,015
60 Stanford U.	4,777	5,007	6,103	5,423	4,546	4,698	5,770	5,042
Total, 1st 60 institutions	859,119	892,652	923,464	963,435	669,454	689,013	712,447	745,090
61 Northwestern U.	4,247	5,061	5,218	5,419	3,404	3,577	3,492	3,321
62 U. UT	4,624	4,051	4,319	5,391	3,847	3,092	3,019	4,559
63 U. CA Davis	4,892	4,772	4,872	5,345	3,180	3,133	3,206	3,216
64 U. VA all campuses	4,256	3,515	3,407	5,213	3,913	3,262	3,146	4,764
65 U. NC Chapel Hill	7,268	7,500	4,509	5,170	6,294	6,240	3,605	4,031
66 Brown U.	4,389	4,666	5,216	5,155 i	2,270	2,481	2,978	2,973 i
67 U. Pittsburgh all campuses	3,584	3,929	4,310	4,992	3,109	3,326	3,694	4,398
68 U. TX M. D. Anderson Cancer Ctr.	3,678	3,707	4,409	4,936	2,542	2,670	3,172	3,452
69 U. OK all campuses	2,733	3,037	3,116	4,910	1,566	1,517	1,629	2,630
70 NJ Institute of Technology	1,196	1,382	4,483	4,862	708	693	2,883	2,987
Total, 1st 70 institutions	899,986	934,272	967,323	1,014,828	700,287	719,004	743,271	781,421
71 Boston U.	4,034	4,417	4,629	4,780	3,882	4,374	4,535	4,696
72 U. SC all campuses	4,351	3,600	4,508	4,774	2,158	2,250	2,842	3,239
73 U. HI Manoa	2,179	2,592	4,044	4,765	1,999	2,353	3,797	4,677
74 C. of William and Mary all campuses	2,733	2,860	2,872	4,469	2,392	2,479	2,461	4,095
75 U. OR	4,657	4,002	3,942	4,414	3,937	3,461	3,510	3,931
76 U. GA	3,600	3,508	3,893	4,410	1,095	1,281	1,290	1,798
77 U. AR main campus	1,838	3,043	3,729	4,391	989	1,322	2,568	2,598
78 Catholic U. America	2,248	1,377	3,053	4,293	2,093	1,347	2,833	3,526
79 Rice U.	2,767	2,890	3,312	4,202	2,450	2,559	2,920	3,708
80 U. MA Amherst	7,243	8,238	4,295	4,105	4,105	4,612	2,019	1,941
Total, 1st 80 institutions	935,636	970,799	1,005,600	1,059,431	725,387	745,042	772,046	815,630

See explanatory information and SOURCE at end of table.

TABLE B-53. Total and federally financed R&D expenditures in physics at universities and colleges, ranked by fiscal year 2002 total R&D expenditures in physics: fiscal years 1999--2002

(Dollars in thousands)

Institution and ranking	Total				Federally financed			
	1999	2000	2001	2002	1999	2000	2001	2002
81 U. KS all campuses	2,153	1,856	2,452	4,068	1,352	1,343	1,328	2,830
82 U. CT all campuses	2,516	3,408	3,508	3,967	1,584	1,756	1,957	2,365
83 Northern IL U.	2,079	2,313	2,749	3,855	1,245	1,171	1,158	1,421
84 U. NV, Reno	2,486	2,908	2,952	3,585	2,398	2,908	2,935	3,520
85 Clemson U.	2,755	3,219	4,114	3,547	751	877	2,528	2,333
86 AZ State U. main campus	4,579	3,893	4,258	3,438	3,341	2,802	2,724	2,696
87 U. MA Lowell	3,313	3,194	3,556	3,390	2,628	2,514	2,863	2,798
88 U. KY all campuses	2,863	3,281	3,588	3,376	1,745	1,870	2,058	2,244
89 SUNY Buffalo all campuses	2,395	2,407	3,342	3,181	955	724	1,915	2,254
90 OH U. all campuses	2,999	3,081	3,151	3,124	2,202	2,151	2,285	2,077
Total, 1st 90 institutions	963,774	1,000,359	1,039,270	1,094,962	743,588	763,158	793,797	840,168
91 U. DE	1,543	1,820	2,582	3,122	970	1,030	1,625	2,044
92 OK State U. all campuses	4,375	3,642	3,475	3,002	1,344	1,088	1,056	1,436
93 Fisk U.	2,639	3,289	2,702	3,000	2,342	2,652	2,559	3,000
94 TX Tech U.	1,918	2,022	1,878	2,936	919	911	735	1,413
95 WV U.	2,413	3,032	3,206	2,921	1,704	1,828	1,949	2,329
96 IA State U.	4,082	4,093	5,033	2,911	2,370	2,442	2,951	2,246
97 NY U.	1,663	2,362	2,287	2,857	1,547	1,829	1,997	2,476
98 Case Western Reserve U.	1,918	1,754	2,243	2,854	1,629	1,422	2,088	2,709
99 Naval Postgraduate School	2,170 i	2,393 i	2,617 i	2,849 i	2,087 i	2,285 i	2,528 i	2,796 i
100 Syracuse U. all campuses	4,123	2,721	2,703	2,837	3,125	2,648	2,619	2,674
Total, 1st 100 institutions	990,618	1,027,487	1,067,996	1,124,251	761,625	781,293	813,904	863,291
Total, all other sampled institutions	158,491	179,537	171,679	157,841	105,820	119,378	112,817	107,522

e = estimated.
i = imputed.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-54. R&D expenditures in the environmental sciences at universities and colleges, ranked by fiscal year 2002 R&D expenditures in the environmental sciences: fiscal years 1999--2002 and by subfield for 2002

(Dollars in thousands)

Institution and ranking	1999	2000	2001	2002	2002, by subfield			
					Atmos-pheric	Earth sciences	Ocean-ography	Other
Total, all institutions	1,691,658	1,764,409	1,829,939	2,022,423	340,778	645,021	719,406	317,218
1 U. CA San Diego	107,958	115,186	119,096	114,136	9,014	25,979	77,949	1,194
2 TX A&M U. all campuses	69,296	85,330	80,789	81,950	4,199	4,246	62,225	11,280
3 Woods Hole Oceanographic Institution	58,723	64,910	71,849	77,560	5,657 i	25,438 i	20,263 i	26,202 i
4 U. AK Fairbanks all campuses	18,756	21,644	30,488	71,747	37,545	9,442	24,760	0
5 U. WA	60,382	64,112	73,448	71,330	16,176	7,618	47,536	0
6 U. CO all campuses	71,479	62,770	51,590	60,896	17,644	41,078	1,666	508
7 Columbia U. in the City of New York	44,003	49,198	46,375	52,455	5,443	360	44,053	2,599
8 U. HI Manoa	52,019	51,453	47,185	45,908	3,545	9,506	28,416	4,441
9 U. NH	27,107	36,418	40,098	38,664	7,340	14,301	16,998	25
10 U. MD Ctr. for Environmental Science	26,816	31,605	36,635	38,501	0	4,134	34,367	0
Total, 1st 10 institutions	536,539	582,626	597,553	653,147	106,563	142,102	358,233	46,249
11 CO State U.	14,773	14,402	15,671	38,167	18,742	1,646	0	17,779
12 U. Miami	28,452	28,353	30,957	37,275	18,906	9	16,243	2,117
13 U. IL Urbana-Champaign	28,452	28,497	33,855	36,157	2,757	31,536	0	1,864
14 Johns Hopkins U., The	44,700	37,558	36,577	35,791	6,931 i	2,436 i	11,091 i	15,333 i
15 LA State U. all campuses	27,441	31,665	32,636	35,314	0	6,967	21,644	6,703
16 OR State U.	31,385	33,940	36,295	34,844	1,424	1,788	22,669	8,963
17 U. WI Madison	25,695	28,001	29,040	34,220	20,286	4,765	3,443	5,726
18 U. OK all campuses	27,018	29,158	29,571	33,499	25,804	7,695	0	0
19 U. CA Davis	6,981	9,958	30,580	29,532	0	2,046	5,745	21,741
20 PA State U. all campuses	26,740	20,396	22,550	27,679	8,587	18,273	632	187
Total, 1st 20 institutions	798,176	844,554	895,285	995,625	210,000	219,263	439,700	126,662
21 U. TX Austin	20,980	24,134	24,932	27,396	0	20,927	5,958	511
22 C. of William and Mary all campuses	23,707	23,938	24,956	26,493	0	153	26,340	0
23 U. South FL	17,526	19,197	18,752	25,479	0	2,496	22,899	84
24 Rutgers The State U. NJ all campuses	17,959	20,936	20,511	25,279	700	875	12,311	11,393
25 U. RI	22,602	23,212	24,245	23,869	0	622	23,236	11
26 U. CA Santa Barbara	24,007	28,009	22,963	22,840	0	3,419	18,622	799
27 Desert Research Institute	17,043	19,513	22,765	22,123	14,339	7,784	0	0
28 MA Institute of Technology	23,494	22,009	21,390	22,007	9,043	8,303	3,756	905
29 SUNY Stony Brook all campuses	19,413	17,379	17,199	20,744	2,175	7,131	11,438	0
30 U. SC all campuses	17,812	15,868	16,449	20,297	0	10,194	4,257	5,846
Total, 1st 30 institutions	1,002,719	1,058,749	1,109,447	1,232,152	236,257	281,167	568,517	146,211
31 FL State U.	13,871	14,303	14,893	19,232	6,669	7,862	4,637	64
32 U. ME	11,974	15,214	19,969	18,952	0	7,761	11,191	0
33 NC State U.	17,945	15,699	16,099	16,842	0	0	8,920	7,922
34 GA Institute of Technology all campuses	13,224	23,382	16,924	15,590	824	11,835	0	2,931
35 Princeton U.	10,630	12,946	13,293	15,508	3,568	5,359	0	6,581

See explanatory information and SOURCE at end of table.

TABLE B-54. R&D expenditures in the environmental sciences at universities and colleges, ranked by fiscal year 2002 R&D expenditures in the environmental sciences: fiscal years 1999--2002 and by subfield for 2002

(Dollars in thousands)

Institution and ranking	1999	2000	2001	2002	2002, by subfield			
					Atmos-pheric	Earth sciences	Ocean-ography	Other
36 U. NC Chapel Hill	11,271	11,382	12,615	15,402	0	10,188	5,214	0
37 U. Southern CA	12,095	14,394	14,440	15,381	0	11,168	3,570	643
38 U. CA Santa Cruz	12,880	13,839	13,048	15,367	0	5,215	8,711	1,441
39 U. MD Baltimore County	5,442	5,373	10,412	15,336	14,734	602	0	0
40 Harvard U.	14,089	13,868	13,765	15,095	576	1,523	1,781	11,215
Total, 1st 40 institutions	1,126,140	1,199,149	1,254,905	1,394,857	262,628	342,680	612,541	177,008
41 U. NV, Las Vegas	7,862	10,579	11,713	14,920 i	0 i	953 i	0 i	13,967 i
42 U. CA Los Angeles	9,960	14,893	14,774	14,824	4,245	3,353	0	7,226
43 VA Polytechnic Institute & State U.	21,462	16,786	15,734	13,525	0	3,201	0	10,324
44 U. GA	12,694	13,994	14,687	13,399	0	4,672	8,727	0
45 CA Institute of Technology	14,611	13,846	10,771	13,131	0	13,131	0	0
46 U. CA Riverside	8,968	11,115	3,849	12,273	0	4,535	0	7,738
47 U. MN all campuses	12,986	12,762	13,528	12,055	0	6,046	847	5,162
48 U. KS all campuses	9,858	10,919	10,900	11,261	0	11,261	0	0
49 U. Southern MS	6,876	6,238	5,703	10,964	0	373	10,591	0
50 U. MD College Park	6,828	6,402	9,464	10,949	5,185	5,764	0	0
Total, 1st 50 institutions	1,238,245	1,316,683	1,366,028	1,522,158	272,058	395,969	632,706	221,425
51 Naval Postgraduate School	8,218 i	9,038 i	9,854 i	10,899 i	6,507 i	0 i	4,392 i	0 i
52 TX Tech U.	2,565	7,842	11,425	10,489	0	663	0	9,826
53 AZ State U. main campus	16,451	11,532	9,798	10,379	0	10,379	0	0
54 U. DE	9,288	9,960	8,252	10,293	0	970	9,323	0
55 U. AZ	11,071	10,343	10,549	10,219	3,494	6,725	0	0
56 UT State U.	11,712	8,453	8,522	9,804	1,909	7,895	0	0
57 U. CT all campuses	7,486	8,259	9,127	9,780	0	403	9,377	0
58 San Jose State U.	9,427e	9,427e	7,968	9,517	737	183	8,487	110
59 Duke U.	7,629	7,556	8,406	9,425	0	1,713	2,959	4,753
60 U. Central FL	9,068	8,250	9,416	9,238	9,238	0	0	0
Total, 1st 60 institutions	1,331,160	1,407,343	1,459,345	1,622,201	293,943	424,900	667,244	236,114
61 OH State U. all campuses	8,355	7,512	8,746	9,231	0	4,467	0	4,764
62 NM Institute of Mining and Technology	6,741	6,535	7,361	9,004	0	6,774	0	2,230
63 Stanford U.	8,260	8,111	8,270	8,809	0	8,809	0	0
64 U. MD Biotechnology Institute	7,747	7,442	8,066	8,558	0	0	8,558	0
65 U. NE Lincoln	11,314	12,710	8,347	7,415	970	6,445	0	0
66 U. CA Berkeley	7,244	7,132	6,513	7,069	44	7,025	0	0
67 U. AL Huntsville, The	5,287	5,241	5,772	7,003	7,003	0	0	0
68 U. NV, Reno	6,747	6,552	6,464	6,909	226	4,924	0	1,759
69 U. CA Irvine	3,023	3,373	3,982	6,857	0	0	0	6,857
70 MS State U.	3,199	3,540	6,298	6,752	0	203	0	6,549
Total, 1st 70 institutions	1,399,077	1,475,491	1,529,164	1,699,808	302,186	463,547	675,802	258,273
71 U. WY	6,542	7,968	6,483	6,483e	2,519e	3,964e	0e	0e
72 George Mason U.	52	5,059	7,399	6,479	0	6,479	0	0
73 Cornell U. all campuses	4,170	4,221	3,790	6,117	0	3,715	23	2,379
74 U. NC Wilmington	5,098	5,070	4,503	5,922	0	140	5,782	0
75 U. TN system	10,882	9,330	6,736	5,865	0	1,576	0	4,289

See explanatory information and SOURCE at end of table.

TABLE B-54. R&D expenditures in the environmental sciences at universities and colleges, ranked by fiscal year 2002 R&D expenditures in the environmental sciences: fiscal years 1999--2002 and by subfield for 2002

(Dollars in thousands)

Institution and ranking	1999	2000	2001	2002	2002, by subfield			
					Atmos-pheric	Earth sciences	Ocean-ography	Other
76 WV U.	3,335	5,671	4,530	5,777	0	568	0	5,209
77 SUNY Albany	6,443	6,379	7,226	5,693	5,693	0	0	0
78 Brown U.	5,535	5,370	5,499	5,683	0 i	5,352 i	0 i	331 i
79 U. MI all campuses	6,292	6,307	5,378	5,524	0	5,083	441	0
80 U. FL	5,070	3,830	5,873	5,470	0	3,136	2,334	0
Total, 1st 80 institutions	1,452,496	1,534,696	1,586,581	1,758,821	310,398	493,560	684,382	270,481
81 U. TX El Paso	6,703	4,423	5,467	5,268	0	5,268	0	0
82 U. UT	3,756	4,040	4,989	5,097	2,283	2,814	0	0
83 Washington U. St. Louis	4,385	4,374	4,615	4,971	0	4,971	0	0
84 WA State U.	1,392	1,896	2,963	4,840	0	4,813	0	27
85 U. PR Mayaguez Campus	4,421	3,642	4,534	4,763	0	642	4,121	0
86 U. MA Dartmouth	1,288	2,227	3,466	4,703	0	0	4,703	0
87 San Diego State U.	2,861	3,166	2,952	4,646	0	4,256	390	0
88 U. Chicago	5,966	5,663	4,526	4,559	0	4,559	0	0
89 U. MA Amherst	7,587	3,887	4,537	4,550	0	2,666	242	1,642
90 U. VA all campuses	5,590	5,589	5,189	4,441	4,441	0	0	0
Total, 1st 90 institutions	1,496,445	1,573,603	1,629,819	1,806,659	317,122	523,549	693,838	272,150
91 U. Memphis, The	3,416	4,095	3,753	4,340	0	4,132	0	208
92 IA State U.	3,343	3,803	4,370	4,192	0	4,192	0	0
93 Purdue U. all campuses	4,272	4,096	4,011	4,128	1,378	856	0	1,894
94 Tarleton State U.	3,559	3,717	3,945	4,103	0	4,103	0	0
95 IN U. all campuses	6,428	3,070	3,927	4,085	0	4,085	0	0
96 U. WI Milwaukee	3,638	3,675	3,699	4,008	0	337	3,614	57
97 U. ID	3,932	4,656	4,284	3,944	0	2,530	0	1,414
98 FL International U.	4,072	6,372	6,412	3,883	0	3,883	0	0
99 Old Dominion U.	6,199	5,788	3,692	3,847	0	0	3,746	101
100 U. TX Dallas	1,576	1,436	1,436e	3,801	3,801	0	0	0
Total, 1st 100 institutions	1,536,880	1,614,311	1,669,348	1,846,990	322,301	547,667	701,198	275,824
Total, all other sampled institutions	154,778	150,098	160,591	175,433	18,477	97,354	18,208	41,394

e = estimated.
i = imputed.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-55. Federally financed R&D expenditures in the environmental sciences at universities and colleges, ranked by fiscal year 2002 federally financed R&D expenditures in the environmental sciences: fiscal years 1999--2002 and by subfield for fiscal year 2002

(Dollars in thousands)

Institution and ranking	1999	2000	2001	2002	2002, by subfield			
					Atmos-pheric	Earth sciences	Ocean-ography	Other
Total, all institutions	1,101,656	1,132,546	1,184,566	1,293,610	249,567	374,089	485,727	184,227
1 U. CA San Diego	65,829	72,813	71,006	72,667	6,268	11,396	54,612	391
2 Woods Hole Oceanographic Institution	50,237	54,235	60,302	63,761	4,336 i	22,333 i	16,196 i	20,896 i
3 U. WA	55,954	58,356	66,244	61,985	13,936	6,024	42,025	0
4 TX A&M U. all campuses	53,624	61,397	55,728	56,223	2,482	1,147	49,237	3,357
5 U. CO all campuses	61,055	56,172	47,056	56,117	16,445	37,634	1,559	479
6 Columbia U. in the City of New York	40,712	46,838	44,889	49,623	5,071	230	41,806	2,516
7 U. AK Fairbanks all campuses	8,091	10,884	27,109	43,983	23,650	5,374	14,959	0
8 Johns Hopkins U., The	42,057	35,596	34,923	34,678	6,931 i	2,311 i	11,089 i	14,347 i
9 U. Miami	25,455	25,388	27,240	33,285	16,474	8	15,081	1,722
10 OR State U.	26,936	28,487	30,081	29,777	1,370	1,130	20,743	6,534
Total, 1st 10 institutions	429,950	450,166	464,578	502,099	96,963	87,587	267,307	50,242
11 U. HI Manoa	32,859	30,503	30,569	28,555	3,091	5,198	18,346	1,920
12 U. NH	18,008	24,122	25,935	28,454	4,417	11,484	12,553	0
13 CO State U.	11,630	12,451	13,143	27,743	14,079	1,202	0	12,462
14 U. WI Madison	16,406	17,784	21,731	23,315	16,893	2,342	737	3,343
15 U. RI	20,105	20,311	22,999	22,849	0	408	22,440	1
16 MA Institute of Technology	20,150	20,410	18,652	18,713	7,662	7,054	3,481	516
17 U. South FL	11,034	11,782	11,178	16,759	0	1,272	15,487	0
18 Desert Research Institute	11,720	14,685	16,435	16,553	9,923	6,630	0	0
19 PA State U. all campuses	15,554	10,886	10,656	15,160	3,989	10,885	220	66
20 U. MD Baltimore County	4,602	4,654	9,072	14,247	13,681	566	0	0
Total, 1st 20 institutions	592,018	617,754	644,948	714,447	170,698	134,628	340,571	68,550
21 Harvard U.	13,424	12,362	12,415	14,202	483	1,523	981	11,215
22 U. CA Davis	1,809	2,265	12,924	14,139	0	856	1,376	11,907
23 U. NV, Las Vegas	5,658	8,350	9,180	13,095 i	0 i	572 i	0 i	12,523 i
24 U. MD Ctr. for Environmental Science	8,116	10,805	12,105	13,080	0	900	12,180	0
25 U. OK all campuses	13,541	14,805	13,597	12,890	11,765	1,125	0	0
26 SUNY Stony Brook all campuses	13,432	11,745	10,408	12,531	1,620	4,644	6,267	0
27 LA State U. all campuses	6,223	9,649	10,665	12,047	0	2,126	9,223	698
28 FL State U.	9,700	10,330	10,675	11,698	4,904	4,090	2,690	14
29 U. CA Santa Barbara	16,140	17,649	13,227	11,565	0	1,367	9,617	581
30 Rutgers The State U. NJ all campuses	8,361	8,947	8,734	11,484	225	506	8,800	1,953
Total, 1st 30 institutions	688,422	724,661	758,878	841,178	189,695	152,337	391,705	107,441
31 CA Institute of Technology	14,141	11,353	10,319	11,207	0	11,207	0	0
32 U. Southern CA	8,698	9,513	10,499	11,194	0	8,045	2,603	546
33 VA Polytechnic Institute & State U.	20,094	14,804	12,693	10,984	0	1,052	0	9,932
34 Naval Postgraduate School	8,029 i	8,792 i	9,669 i	10,695 i	6,385 i	0 i	4,310 i	0 i
35 U. TX Austin	5,904	10,450	10,355	10,406	0	8,323	2,047	36

See explanatory information and SOURCE at end of table.

TABLE B-55. Federally financed R&D expenditures in the environmental sciences at universities and colleges, ranked by fiscal year 2002 federally financed R&D expenditures in the environmental sciences: fiscal years 1999--2002 and by subfield for fiscal year 2002

(Dollars in thousands)

Institution and ranking	1999	2000	2001	2002	2002, by subfield			
					Atmos-pheric	Earth sciences	Ocean-ography	Other
36 U. Southern MS	6,489	5,860	5,318	10,184	0	373	9,811	0
37 U. IL Urbana-Champaign	10,463	10,468	11,765	10,021	2,092	7,233	0	696
38 AZ State U. main campus	15,030	10,167	8,657	9,935	0	9,935	0	0
39 Princeton U.	6,696	8,035	7,812	9,857	3,071	3,899	0	2,887
40 C. of William and Mary all campuses	7,769	7,847	9,213	9,630	0	106	9,524	0
Total, 1st 40 institutions	791,735	821,950	855,178	945,291	201,243	202,510	420,000	121,538
41 U. ME	6,205	6,399	8,796	9,340	0	3,335	6,005	0
42 U. NC Chapel Hill	6,337	6,118	7,640	8,753	0	6,875	1,878	0
43 U. CA Los Angeles	6,611	8,514	8,561	8,520	3,370	2,162	0	2,988
44 U. MD College Park	5,381	4,604	7,068	8,112	4,086	4,026	0	0
45 U. CA Santa Cruz	5,945	5,864	6,209	7,613	0	3,305	4,134	174
46 GA Institute of Technology all campuses	5,660	9,687	7,941	7,589	401	5,761	0	1,427
47 U. SC all campuses	6,712	6,655	5,827	7,095	0	3,069	1,981	2,045
48 TX Tech U.	1,386	3,054	5,897	6,857	0	221	0	6,636
49 U. DE	6,173	6,630	5,955	6,769	0	644	6,125	0
50 George Mason U.	41	4,970	7,352	6,429	0	6,429	0	0
Total, 1st 50 institutions	842,186	884,445	926,424	1,022,368	209,100	238,337	440,123	134,808
51 U. AZ	6,625	6,209	6,523	6,211	2,115	4,096	0	0
52 U. CT all campuses	4,107	4,573	5,052	6,181	0	247	5,934	0
53 Stanford U.	6,041	6,029	5,926	5,881	0	5,881	0	0
54 MS State U.	2,162	2,522	5,185	5,795	0	25	0	5,770
55 U. NC Wilmington	3,191	3,839	4,255	5,752	0	118	5,634	0
56 U. MN all campuses	6,120	5,940	6,566	5,501	0	2,712	618	2,171
57 Duke U.	3,921	4,638	4,719	5,263	0	1,103	1,233	2,927
58 U. AL Huntsville, The	4,198	4,261	4,650	5,166	5,166	0	0	0
59 San Jose State U.	4,363e	4,363e	4,283	4,996	545	142	4,292	17
60 U. GA	5,026	4,845	5,628	4,789	0	1,215	3,574	0
Total, 1st 60 institutions	887,940	931,664	979,211	1,077,903	216,926	253,876	461,408	145,693
61 OH State U. all campuses	5,662	3,953	5,287	4,764	0	1,699	0	3,065
62 U. TX El Paso	6,125	3,769	4,894	4,693	0	4,693	0	0
63 U. NV, Reno	4,787	4,307	4,122	4,476	190	4,282	0	4
64 U. Chicago	4,617	5,111	4,148	4,391	0	4,391	0	0
65 NC State U.	5,727	5,291	5,239	4,375	0	0	1,328	3,047
66 U. VA all campuses	4,834	4,865	4,382	4,081	4,081	0	0	0
67 WV U.	1,439	2,180	2,629	4,025	0	431	0	3,594
68 WA State U.	1,124	1,614	2,612	4,022	0	4,019	0	3
69 U. WY	3,518	3,873	3,984	3,984e	1,986e	1,998e	0e	0e
70 Brown U.	3,748	3,377	3,756	3,601	0 i	3,560 i	0 i	41 i
Total, 1st 70 institutions	929,521	970,004	1,020,264	1,120,315	223,183	278,949	462,736	155,447
71 U. TN system	7,051	5,444	4,865	3,570	0	1,150	0	2,420
72 U. CA Berkeley	4,051	3,734	3,515	3,561	0	3,561	0	0
73 U. UT	3,053	3,453	3,761	3,548	2,134	1,414	0	0
74 U. Central FL	2,420	1,543	2,803	3,543	3,543	0	0	0
75 U. CA Riverside	2,681	2,520	1,153	3,401	0	1,586	0	1,815

See explanatory information and SOURCE at end of table.

TABLE B-55. Federally financed R&D expenditures in the environmental sciences at universities and colleges, ranked by fiscal year 2002 federally financed R&D expenditures in the environmental sciences: fiscal years 1999--2002 and by subfield for fiscal year 2002

(Dollars in thousands)

Institution and ranking	1999	2000	2001	2002	2002, by subfield			
					Atmos-pheric	Earth sciences	Ocean-ography	Other
76 NM Institute of Mining and Technology	1,827	1,549	1,920	3,316	0	3,090	0	226
77 U. MI all campuses	4,292	4,319	3,232	3,057	0	2,780	277	0
78 Jackson State U.	0	1,743	3,123	3,006	127	2,731	148	0
79 U. TX Dallas	777	1,020	1,020e	2,991	2,991	0	0	0
80 U. CA Irvine	2,263	1,982	2,660	2,979	0	0	0	2,979
Total, 1st 80 institutions	957,936	997,311	1,048,316	1,153,287	231,978	295,261	463,161	162,887
81 SUNY Albany	2,991	3,207	3,362	2,961	2,961	0	0	0
82 UT State U.	6,739	3,053	3,048	2,895	1,382	1,513	0	0
83 U. ND all campuses	1,365	1,618	1,573	2,877	1,308	1,128	0	441
84 Boston U.	3,095	2,918	2,960	2,824	0	561	0	2,263
85 Hampton U.	1,517	3,637	878	2,819	2,507	0	312	0
86 Cornell U. all campuses	2,565	2,098	1,722	2,797	0	1,917	21	859
87 U. NE Lincoln	6,857	7,264	3,875	2,796	968	1,828	0	0
88 U. FL	2,527	1,924	2,897	2,732	0	1,254	1,478	0
89 Old Dominion U.	3,665	3,283	2,416	2,703	0	0	2,703	0
90 Purdue U. all campuses	2,731	2,683	2,683	2,681	876	438	0	1,367
Total, 1st 90 institutions	991,988	1,028,996	1,073,730	1,181,372	241,980	303,900	467,675	167,817
91 U. MD Biotechnology Institute	5,894	2,773	3,008	2,635	0	0	2,635	0
92 FL International U.	3,001	3,732	3,466	2,612	0	2,612	0	0
93 U. Redlands	--	--	--	2,596	0	2,596	0	0
94 Washington U. St. Louis	2,779	2,757	2,508	2,588	0	2,588	0	0
95 U. KS all campuses	2,287	2,547	2,383	2,526	0	2,526	0	0
96 IA State U.	2,006	2,071	2,640	2,332	0	2,332	0	0
97 Yale U.	1,780	2,317	1,836	2,236	246	1,588	313	89
98 U. ID	2,046	2,685	2,171	2,152	0	1,217	0	935
99 U. PR Mayaguez Campus	2,916	1,826	2,245	2,040	0	140	1,900	0
100 San Diego State U.	1,058	1,655	1,783	1,972	0	1,621	351	0
Total, 1st 100 institutions	1,015,755	1,051,359	1,095,770	1,205,061	242,226	321,120	472,874	168,841
Total, all other sampled institutions	85,901	81,187	88,796	88,549	7,341	52,969	12,853	15,386

-- = not available.
e = estimated.
i = imputed.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-56. Total and federally financed R&D expenditures in the mathematical sciences at universities and colleges, ranked by fiscal year 2002 total R&D expenditures in the mathematical sciences: fiscal years 1999--2002

(Dollars in thousands)

Institution and ranking	Total				Federally financed			
	1999	2000	2001	2002	1999	2000	2001	2002
Total, all institutions	313,317	340,956	358,710	386,584	209,229	228,647	241,653	266,788
1 Johns Hopkins U., The [1]	24,302	24,195	23,901	25,826	24,238	24,072	23,763	25,558
2 U. TX Austin	13,911	15,011	16,304	16,782	9,585	9,699	11,148	12,420
3 George Washington U.	13,910	16,276	14,654	14,712	13,376	15,835	13,644	13,942
4 Boston C.	9,562	12,077	14,514	13,639	6,780	7,295	9,695	9,629
5 NC State U.	8,995	10,839	11,795	10,816	2,511	4,494	4,586	3,178
6 U. TX M. D. Anderson Cancer Ctr.	3,625	5,142	7,341	10,347	855	1,239	2,058	3,882
7 Rutgers The State U. NJ all campuses	9,748	8,728	6,733	8,211	5,664	4,652	2,960	3,504
8 IA State U.	6,272	6,907	6,276	7,620	2,782	3,182	2,597	3,733
9 GA Institute of Technology all campuses	3,963	5,829	7,885	7,563	1,696	2,415	3,700	3,682
10 U. CA Berkeley	4,069	5,730	6,070	7,474	3,230	4,476	4,707	5,881
Total, 1st 10 institutions	98,357	110,734	115,473	122,990	70,717	77,359	78,858	85,409
11 TX A&M U. all campuses	2,764	3,684	5,334	7,229	1,791	2,715	3,784	6,122
12 SUNY Stony Brook all campuses	5,071	4,903	4,732	7,061	3,447	3,006	2,877	4,269
13 PA State U. all campuses	3,358	3,750	5,881	6,802	2,140	2,318	2,424	4,031
14 Brown U.	7,308	7,439	6,807	6,636	5,035	4,760	4,405	4,379
15 NY U.	5,652	5,555	6,780	6,275	5,005	4,746	6,562	5,779
16 U. FL	4,687	4,705	5,636	6,229	2,564	2,600	3,068	4,002
17 U. MN all campuses	5,069	4,327	4,682	5,921	4,172	3,579	3,974	4,133
18 U. IL Chicago	2,694	3,324	4,204	5,721	1,680	2,291	3,057	4,352
19 U. GA	4,778	4,732	5,243	5,681	634	598	736	1,117
20 MA Institute of Technology	5,138	5,097	5,046	5,185	4,131	4,169	4,255	3,979
Total, 1st 20 institutions	144,876	158,250	169,818	185,730	101,316	108,141	114,000	127,572
21 Stanford U.	4,577	5,146	4,737	5,126	4,303	4,672	4,444	4,853
22 Purdue U. all campuses	3,195	3,277	3,797	4,636	1,452	1,533	2,015	2,543
23 U. WA	3,724	4,366	4,603	4,445	3,259	3,849	3,922	3,988
24 U. CA Los Angeles	4,748	4,957	5,988	4,229	4,115	3,426	4,331	3,147
25 OH State U. all campuses	1,500	1,751	1,981	4,196	1,202	1,364	1,498	1,509
26 U. MI all campuses	3,170	3,115	4,117	4,169	2,573	2,448	3,532	3,235
27 Western MI U.	2,321	3,038	3,712	4,159	1,578	2,225	2,165	2,815
28 U. WI Madison	3,643	3,833	4,461	4,157	1,857	1,767	2,234	2,251
29 Princeton U.	2,560	3,158	3,663	4,151	1,781	1,928	2,110	2,772
30 Naval Postgraduate School	3,048 i	3,344 i	3,639 i	4,102 i	3,021 i	3,308 i	3,639 i	4,025 i
Total, 1st 30 institutions	177,362	194,235	210,516	229,100	126,457	134,661	143,890	158,710
31 U. IL Urbana-Champaign	2,259	2,597	2,730	3,565	1,235	1,316	1,576	2,227
32 Rice U.	2,466	2,809	2,300	3,183	2,239	2,660	2,148	2,990
33 U. MA Amherst	1,567	2,298	2,900	3,124	1,190	1,653	2,112	2,007
34 Carnegie-Mellon U.	3,845	3,757	3,224	3,064	3,164	3,322	2,868	2,292
35 U. AZ	2,409	2,999	2,905	2,814	1,753	2,124	2,252	2,304
36 George Mason U.	654	429	532	2,748	538	342	428	2,696
37 U. Chicago	1,514	2,038	2,010	2,729	1,511	1,980	1,814	2,621
38 U. Southern CA	2,051	2,387	2,337	2,662	1,835	2,202	1,971	2,397
39 Cornell U. all campuses	2,634	2,487	2,625	2,612	1,889	1,729	2,077	1,835
40 San Diego State U.	1,956	2,853	2,554	2,586	588	1,609	1,414	1,362
Total, 1st 40 institutions	198,717	218,889	234,633	258,187	142,399	153,598	162,550	181,441

See explanatory information and SOURCE at end of table.

TABLE B-56. Total and federally financed R&D expenditures in the mathematical sciences at universities and colleges, ranked by fiscal year 2002 total R&D expenditures in the mathematical sciences: fiscal years 1999--2002

(Dollars in thousands)

Institution and ranking	Total				Federally financed			
	1999	2000	2001	2002	1999	2000	2001	2002
41 MI State U.	694	876	1,697	2,532	542	599	1,190	1,684
42 U. MD College Park	745	1,015	1,507	2,370	745	865	821	1,087
43 IN U. all campuses	1,519	2,077	2,133	2,334	930	1,033	1,084	1,377
44 U. SC all campuses	7,546	9,911	3,105	2,309	1,586	2,108	1,424	1,259
45 Clemson U.	2,005	2,319	1,809	2,263	546	632	182	397
46 VA Polytechnic Institute & State U.	2,395	2,666	2,626	2,256	1,370	1,503	1,640	1,521
47 U. CA Davis	913	1,156	1,878	2,116	652	707	1,033	1,521
48 Duke U.	1,277	1,666	1,672	2,040	1,143	1,545	1,564	1,880
49 U. NE Lincoln	1,891	2,016	2,508	2,019	389	396	397	564
50 AZ State U. main campus	1,132	1,677	1,976	2,011	735	960	1,285	1,576
Total, 1st 50 institutions	218,834	244,268	255,544	280,437	151,037	163,946	173,170	194,307
51 U. of the VI	819e	819e	1,375 i	1,930 i	0	0e	0 i	0 i
52 U. PA	949e	1,084	1,060	1,895	949	1,035	1,014	1,865
53 U. CA San Diego	1,115	1,078	1,249	1,894	938	894	914	1,206
54 CO State U.	1,599	1,418	1,169	1,858	557	684	805	1,289
55 FL State U.	4,346	2,275	4,249	1,842	1,499	1,343	999	694
56 Tulane U.	467	730	893	1,742	395	564	747	1,494
57 Boston U.	2,545	1,384	1,979	1,740	2,402	1,274	1,965	1,675
58 U. CO all campuses	2,013	2,144	1,979	1,651	1,418	1,948	1,764	1,479
59 Rockefeller U.	727	1,086	1,432	1,644	173	578	846	946
60 Ithaca C.	1,379	1,767	1,375	1,632	1,307	1,767	1,375	1,632
Total, 1st 60 institutions	234,793	258,053	272,304	298,265	160,675	174,033	183,599	206,587
61 Harvard U.	1,674	1,887	1,769	1,571	1,647	1,853	1,654	1,554
62 CA State U. Dominguez Hills	166 i	0	1,528	1,566	102 i	0	540	409
63 U. New Haven	13	13e	1,492	1,492e	11	11e	1,492	1,492e
64 U. CA Irvine	1,178	1,038	1,249	1,467	789	770	839	1,044
65 U. CA Santa Barbara	2,403	2,842	2,448	1,437	1,656	1,604	1,067	817
66 LA State U. all campuses	1,247	1,346	1,615	1,341	227	318	531	400
67 U. MA Dartmouth	1,043	857	780	1,291	964	727	690	1,153
68 Portland State U.	272	1,270	1,742	1,276	209	935	1,201	935
69 Rensselaer Polytechnic Institute	903	908	1,261	1,274	836	812	1,231	1,118
70 Yale U.	2,357	1,570	1,297	1,259	2,173	1,253	1,221	1,177
Total, 1st 70 institutions	246,049	269,784	287,485	312,239	169,289	182,316	194,065	216,686
71 U. Memphis, The	354	738	785	1,254	298	620	703	1,161
72 NJ Institute of Technology	665	797	1,161	1,230	455	452	893	834
73 U. UT	1,512	1,356	1,006	1,218	1,249	1,130	917	1,022
74 U. Pittsburgh all campuses	904	919	1,146	1,212	838	802	951	1,095
75 U. VT	477	799	1,287	1,155	317	499	837	613
76 Southwest TX State U.	68	286	510	1,136	68	282	482	1,092
77 TX A&M U. Corpus Christi	--	23	104	1,123	--	4	104	1,017
78 U. NC Chapel Hill	675	797	1,087	1,034	616	719	910	826
79 U. IA	750	889	1,058	1,031	551	666	807	727
80 U. MO-Columbia	1,447	1,335	1,335	1,004	541	581	632	665
Total, 1st 80 institutions	252,901	277,723	296,964	323,636	174,222	188,071	201,301	225,738

See explanatory information and SOURCE at end of table.

TABLE B-56. Total and federally financed R&D expenditures in the mathematical sciences at universities and colleges, ranked by fiscal year 2002 total R&D expenditures in the mathematical sciences: fiscal years 1999--2002

(Dollars in thousands)

Institution and ranking	Total				Federally financed			
	1999	2000	2001	2002	1999	2000	2001	2002
81 Grambling State U.	12e	0	0e	994	0e	0	0e	994
82 U. CA Santa Cruz	590	592	747	987	282	249	299	369
83 U. WI Milwaukee	355	557	699	985	70	184	402	368
84 CUNY City C.	322	566	1,075	950	322	563	1,062	947
85 U. LA Lafayette	709	943	983	948	21	58	104	193
86 Columbia U. in the City of New York	926	1,096	762	901	893	1,031	721	901
87 TX Tech U.	763	1,025	789	898	483	628	448	425
88 Northwestern U.	963	1,229	840	891	699	920	670	746
89 OK State U. all campuses	783	1,002	887	884	297	353	281	307
90 Washington U. St. Louis	1,194	1,814	2,224	849	981	1,628	1,996	691
Total, 1st 90 institutions	259,518	286,547	305,970	332,923	178,270	193,685	207,284	231,679
91 MS State U.	525	815	947	848	51	74	119	74
92 U. NM all campuses	532	681	837	827	455	642	784	746
93 UT State U.	376	800	1,025	799	210	603	822	680
94 U. MD Baltimore County	450	614	762	796	414	547	640	695
95 San Jose State U.	268e	268e	752	788	92e	92e	58	65
96 FL Atlantic U.	282	521	510	769	278	509	484	735
97 OR State U.	340	316	324	767	183	185	188	610
98 U. KY all campuses	693	692	619	745	465	506	396	515
99 Western IL U.	757	924	800	726	602	635	508	459
100 U. DE	1,288	1,386	1,289	720	940	984	977	467
Total, 1st 100 institutions	265,029	293,564	313,835	340,708	181,960	198,462	212,260	236,725
Total, all other sampled institutions	48,288	47,392	44,875	45,876	27,269	30,185	29,393	30,063

[1] Johns Hopkins University includes the Applied Physics Laboratory.

-- = not available.
e = estimated.
i = imputed.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-57. Total and federally financed R&D expenditures in the computer sciences at universities and colleges, ranked by fiscal year 2002 total R&D expenditures in the computer sciences: fiscal years 1999--2002

(Dollars in thousands)

Institution and ranking	Total				Federally financed			
	1999	2000	2001	2002	1999	2000	2001	2002
Total, all institutions	861,057	876,001	954,478	1,125,931	582,811	582,699	643,583	769,761
1 Carnegie-Mellon U.	58,744	54,838	60,368	100,132	38,709	36,882	41,511	81,863
2 U. IL Urbana-Champaign	65,803	61,032	55,729	75,064	41,976	41,162	37,891	51,913
3 U. Southern CA	56,745	50,745	64,269	74,061	46,741	46,312	61,724	68,647
4 Johns Hopkins U., The	71,050	70,525	70,155	70,528	70,459	69,244	69,178	69,580
5 U. CA San Diego	36,657	50,199	59,965	56,729	28,339	38,444	49,094	38,925
6 MA Institute of Technology	34,061	34,384	34,618	41,283	26,622	23,290	23,241	24,501
7 GA Institute of Technology all campuses	31,259	34,339	35,925	38,892	13,379	14,227	16,857	18,933
8 U. MD College Park	23,521	19,617	21,229	32,233	14,176	12,029	12,515	20,222
9 OH State U. all campuses	17,249	21,050	22,758	29,173	2,356	1,576	1,415	2,253
10 U. TX Austin	18,109	24,350	23,502	27,376	14,811	18,970	20,605	24,985
Total, 1st 10 institutions	413,198	421,079	448,518	545,471	297,568	302,136	334,031	401,822
11 Cornell U. all campuses	17,683	16,474	17,187	23,403	11,714	9,941	11,890	14,903
12 U. UT	11,441	13,614	16,007	19,660	11,017	10,684	10,922	13,866
13 Stanford U.	17,449	13,732	15,459	15,166	15,767	11,573	12,701	12,834
14 U. MA Amherst	10,481	11,046	11,800	14,291	7,265	7,181	7,836	8,450
15 U. WI Madison	7,360	8,441	9,910	11,517	5,291	6,079	6,770	7,928
16 U. CA Santa Barbara	2,162	2,525	8,273	11,311	1,252	2,069	6,461	7,880
17 U. CA Los Angeles	8,007	7,681	11,313	11,091	5,519	5,190	5,305	7,561
18 U. PA	8,829e	9,034	8,939	10,539	7,037	7,664	7,658	9,393
19 U. HI Manoa	381	412	722	10,115	323	317	689	10,073
20 Purdue U. all campuses	5,583	7,220	8,528	9,733	2,778	2,995	2,850	3,852
Total, 1st 20 institutions	502,574	511,258	556,656	682,297	365,531	365,829	407,113	498,562
21 SUNY Buffalo all campuses	7,270	7,413	7,489	9,720	2,576	2,015	2,220	3,344
22 U. TN system	7,494	7,981	10,451	9,520	2,600	2,787	5,806	5,097
23 U. MN all campuses	7,225	7,763	8,022	9,412	4,216	5,585	5,993	7,308
24 Rice U.	10,839	10,590	8,995	9,075	10,595	10,251	8,688	7,882
25 U. AK Fairbanks all campuses	11,178	12,899	16,159	9,040	138	186	105	0
26 U. NC Chapel Hill	9,531	8,632	7,850	9,005	6,401	5,552	4,591	7,072
27 IN U. all campuses	2,492	3,839	2,395	8,799	1,112	1,529	1,164	2,238
28 Columbia U. in the City of New York	4,966	5,867	5,907	8,604	4,738	5,547	5,341	7,802
29 U. IL Chicago	994	2,082	1,156	8,567	581	1,634	727	6,003
30 U. CA Irvine	4,854	5,040	6,572	8,326	2,933	3,241	4,054	4,087
Total, 1st 30 institutions	569,417	583,364	631,652	772,365	401,421	404,156	445,802	549,395
31 NY U.	5,959	5,920	7,220	8,085	3,620	3,720	4,764	5,884
32 U. AZ	4,836	4,686	6,158	7,954	3,524	3,488	4,325	5,447
33 U. MI all campuses	9,545	9,110	10,184	7,384	2,560	3,386	5,261	2,561
34 U. WA	4,956	4,872	6,295	7,130	4,254	4,050	5,316	6,383
35 Brown U.	4,729	4,646	5,473	7,126	3,036	2,898	3,364	4,744
36 CA Institute of Technology	10,113	5,969	4,402	6,906	10,041	5,559	4,340	6,696
37 Princeton U.	4,565	5,657	6,938	6,745	2,012	2,600	3,869	4,450
38 Syracuse U. all campuses	11,495	6,601	4,889	6,653	8,714	4,670	2,803	3,094
39 TX A&M U. all campuses	3,237	3,309	4,865	6,460	1,575	1,903	2,894	3,892
40 SUNY Stony Brook all campuses	3,496	2,956	3,245	6,166	1,806	1,744	1,962	2,660
Total, 1st 40 institutions	632,348	637,090	691,321	842,974	442,563	438,174	484,700	595,206

See explanatory information and SOURCE at end of table.

TABLE B-57. Total and federally financed R&D expenditures in the computer sciences at universities and colleges, ranked by fiscal year 2002 total R&D expenditures in the computer sciences: fiscal years 1999--2002

(Dollars in thousands)

Institution and ranking	Total				Federally financed			
	1999	2000	2001	2002	1999	2000	2001	2002
41 NJ Institute of Technology	2,249	212	1,958	5,892	1,181	212	275	1,681
42 Rutgers The State U. NJ all campuses	6,152	6,432	5,264	5,885	2,488	2,259	1,985	1,551
43 Washington U. St. Louis	8,205	7,263	6,254	5,885	5,666	5,189	4,826	4,667
44 U. Houston	2,780	3,267	3,292	5,638	1,798	2,043	2,155	2,905
45 U. CO all campuses	6,990	6,053	5,577	5,440	5,671	5,185	4,860	4,730
46 Naval Postgraduate School	3,930 i	4,307 i	4,702 i	5,302 i	3,916 i	4,289 i	4,702 i	5,203 i
47 U. LA Lafayette	3,714	3,308	2,711	5,295	1,829	1,245	859	767
48 U. KY all campuses	1,084	1,368	1,908	5,158	748	1,038	1,558	2,237
49 Yale U.	2,408	2,411	4,396	5,076	1,898	1,316	3,870	3,925
50 U. AL Huntsville, The	5,971	7,374	9,599	5,031	3,963	4,950	4,630	4,258
Total, 1st 50 institutions	675,831	679,085	736,982	897,576	471,721	465,900	514,420	627,130
51 Dartmouth C.	2,010	1,976	4,383	4,900	1,469	1,648	3,474	4,043
52 U. West FL	3,022	4,429	5,303	4,890	2,332	3,773	3,999	3,499
53 Jackson State U.	3,203	2,526	6,042	4,768	2,880	2,199	5,356	4,070
54 U. VA all campuses	5,194	3,544	4,020	4,723	4,683	3,242	3,137	4,168
55 IA State U.	3,003	3,060	3,750	4,649	860	280	447	1,067
56 AZ State U. main campus	2,540	3,224	3,183	4,556	1,073	1,351	1,817	2,730
57 MI State U.	2,990	3,677	3,745	4,542	1,635	1,791	1,684	2,408
58 NC State U.	3,007	5,175	5,234	4,512	1,393	2,733	3,369	2,576
59 VA Polytechnic Institute & State U.	2,168	2,208	1,955	4,486	1,526	1,030	1,116	1,581
60 Duke U.	1,595	2,421	3,595	4,383	1,082	1,799	2,931	3,629
Total, 1st 60 institutions	704,563	711,325	778,192	943,985	490,654	485,746	541,750	656,901
61 PA State U. all campuses	1,145	5,878	4,250	4,303	488	4,346	3,016	3,378
62 U. NE Lincoln	2,392	3,203	4,038	4,265	740	814	770	2,679
63 FL State U.	2,674	3,140	2,477	4,042	2,055	1,860	2,018	2,783
64 Rockefeller U.	1,498	1,907	3,237	3,767	93	167	605	742
65 Wright State U. all campuses	1,429	4,076	3,750	3,564	185	1,073	1,211	1,302
66 U. Pittsburgh all campuses	2,935	2,273	3,030	3,398	2,656	1,873	2,094	2,364
67 George Mason U.	1,265	1,007	1,201	3,350	586	940	1,048	3,278
68 LA State U. all campuses	2,104	2,076	2,993	3,301	315	291	281	488
69 Drexel U.	1,172	1,212	1,626	3,152	170	255	1,138	2,146
70 CA State Polytechnic U. San Luis Obispo	4,647	4,274	4,460	2,991	4,646	4,225	4,188	2,780
Total, 1st 70 institutions	725,824	740,371	809,254	980,118	502,588	501,590	558,119	678,841
71 U. OK all campuses	2,709	2,713	2,774	2,976	74	81	186	202
72 U. NM all campuses	2,797	2,323	2,244	2,857	2,246	2,038	1,891	2,609
73 U. CA Santa Cruz	1,605	2,028	2,136	2,810	1,329	1,612	1,742	2,297
74 Northwestern U.	3,173	3,700	3,899	2,808	1,815	1,893	2,145	2,258
75 U. Rochester	3,103	2,307	2,288	2,763	2,986	2,226	2,082	2,516
76 U. TX Dallas	976	853	853e	2,735	345	226	226e	1,091
77 George Washington U.	21	0	0	2,722	12	0	0	1,775
78 Harvard U.	1,386	2,017	2,492	2,716	1,308	1,602	1,745	2,716
79 U. CA Davis	2,522	2,563	2,053	2,677	1,896	1,628	989	1,246
80 FL International U.	2,003	2,303	2,087	2,641	1,319	1,349	1,128	1,777
Total, 1st 80 institutions	746,119	761,178	830,080	1,007,823	515,918	514,245	570,253	697,328

See explanatory information and SOURCE at end of table.

TABLE B-57. Total and federally financed R&D expenditures in the computer sciences at universities and colleges, ranked by fiscal year 2002 total R&D expenditures in the computer sciences: fiscal years 1999--2002

(Dollars in thousands)

Institution and ranking	Total				Federally financed			
	1999	2000	2001	2002	1999	2000	2001	2002
81 Howard U.	1,171	2,325	3,012	2,635	1,075	1,933	2,635	2,464
82 MS State U.	1,960	2,199	2,146	2,526	1,367	781	820	1,196
83 U. FL	3,955	2,404	2,608	2,523	2,679	1,956	2,046	1,893
84 OR State U.	1,887	1,983	2,547	2,518	1,505	1,600	2,009	2,015
85 U. CA Riverside	177	439	1,322	2,297	99	249	591	1,747
86 FL Institute of Technology	865	1,034	1,498	2,281	344	525	333	1,458
87 U. GA	2,706	2,883	2,664	2,264	398	761	564	415
88 U. DE	2,015	1,727	1,694	2,216	1,092	829	809	997
89 GA State U.	866	546	1,042	2,173	274	77	270	491
90 U. OR	3,252	3,075	2,379	2,162	2,921	2,683	2,133	2,142
Total, 1st 90 institutions	764,973	779,793	850,992	1,031,418	527,672	525,639	582,463	712,146
91 Rensselaer Polytechnic Institute	1,021	891	1,505	2,023	673	700	975	1,003
92 Northeastern U.	1,058	924	1,368	2,008	832	570	993	1,649
93 Bowie State U.	2,109	2,109e	2,007	1,985	1,913	1,913e	1,822	1,855
94 KS State U.	491	726	1,009	1,925	378	492	739	1,691
95 U. Chicago	973	1,204	905	1,878	715	1,125	673	1,860
96 U. ME	321	1,058	1,440	1,849	241	296	562	460
97 NM State U. all campuses	5,129	4,486	3,662	1,822	4,091	3,452	2,889	1,370
98 Brandeis U.	1,012	1,242	1,319	1,746	888	1,185	1,274	1,471
99 CO State U.	1,495	1,047	1,312	1,601	922	708	819	1,047
100 U. AL, The	4,667	2,813	545	1,585	412	425	231	997
Total, 1st 100 institutions	783,249	796,293	866,064	1,049,840	538,737	536,505	593,440	725,549
Total, all other sampled institutions	77,808	79,708	88,414	76,091	44,074	46,194	50,143	44,212

e = estimated.
i = imputed.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-58. R&D expenditures in the life sciences at universities and colleges, ranked by fiscal year 2002 R&D expenditures in the life sciences: fiscal years 1999--2002 and by subfield for fiscal year 2002

(Dollars in thousands)

Institution and ranking	1999	2000	2001	2002	2002, by subfield			
					Agri-cultural sciences	Biological sciences	Medical sciences	Other
Total, all institutions	15,629,032	17,467,534	19,212,803	21,404,172	2,433,891	6,577,585	11,504,705	887,991
1 U. CA Los Angeles	327,302	368,030	493,355	573,899	7,565	22,351	537,772	6,211
2 U. CA San Francisco	417,095	429,541	509,607	569,703	0	64,000	505,703	0
3 Johns Hopkins U., The	356,575	385,907	436,484	496,025	0	120,338	347,468	28,219
4 U. WA	327,975	372,339	406,532	436,160	19,525	112,566	284,686	19,383
5 U. PA	302,186	343,388	381,006	422,686	831	155,680	253,871	12,304
6 Baylor C. of Medicine	272,198	334,175	381,461	411,924	0	217,202	194,722	0
7 U. WI Madison	311,730	341,779	370,813	410,300	41,943	135,056	228,724	4,577
8 Washington U. St. Louis	277,281	324,032	365,713	374,666	0	161,833	205,172	7,661
9 U. MN all campuses	269,055	297,925	336,099	372,169	65,828	62,555	231,995	11,791
10 Duke U.	290,206	298,144	312,897	367,043	0	66,854	299,704	485
Total, 1st 10 institutions	3,151,603	3,495,260	3,993,967	4,434,575	135,692	1,118,435	3,089,817	90,631
11 U. MI all campuses	269,752	305,904	325,083	364,265	6,011	101,593	205,213	51,448
12 U. Pittsburgh all campuses	213,648	253,612	298,753	344,239	0	13,114	321,572	9,553
13 U. CA Davis	248,859	292,503	316,573	336,796	111,445	118,477	106,874	0
14 Cornell U. all campuses	222,855	243,158	284,381	314,857	69,355	70,347	175,155	0
15 Harvard U.	221,419	251,246	278,884	307,150	0	81,845	224,969	336
16 Stanford U.	216,764	258,040	275,312	304,658	0	17,853	286,805	0
17 Yale U.	236,121	257,472	279,749	304,345	2,125	101,912	200,308	0
18 U. CA San Diego	215,713	255,497	274,810	293,994	0	50,860	241,406	1,728
19 Columbia U. in the City of New York	184,913	212,281	240,793	280,697	0	101,784	177,161	1,752
20 U. NC Chapel Hill	189,813	204,646	235,300	277,423	0	109,958	140,192	27,273
Total, 1st 20 institutions	5,371,460	6,029,619	6,803,605	7,562,999	324,628	1,886,178	5,169,472	182,721
21 U. MD Baltimore	140,903	224,346	239,007	266,822	0	40,023	213,458	13,341
22 U. TX Southwestern Medical Ctr. Dallas	165,520	189,216	222,376	263,958	0	118,025	145,189	744
23 U. FL	208,356	220,588	238,143	260,138	106,650	53,109	94,775	5,604
24 Emory U.	179,929	192,492	221,105	255,462	0	55,999	150,660	48,803
25 U. TX M. D. Anderson Cancer Ctr.	147,823	173,347	200,996	246,862	0	98,147	148,715	0
26 U. AL Birmingham, The	214,654	216,304	216,201	238,232	0	71,488	164,272	2,472
27 U. IA	157,236	183,099	199,891	227,210	0	53,114	150,216	23,880
28 U. AZ	158,804	180,467	203,319	222,892	53,026	69,688	97,842	2,336
29 U. CO all campuses	149,880	163,191	181,571	219,454	0	57,550	151,887	10,017
30 OH State U. all campuses	169,780	194,937	197,406	214,313	37,255	61,101	96,930	19,027
Total, 1st 30 institutions	7,064,345	7,967,606	8,923,620	9,978,342	521,559	2,564,422	6,583,416	308,945
31 U. Southern CA	145,206	162,756	185,096	205,018	0	7,187	184,196	13,635
32 U. GA	160,990	180,275	188,396	199,155	88,620	84,603	25,611	321
33 Northwestern U.	146,887	153,243	166,035	186,653	0	60,132	117,787	8,734
34 U. IL Chicago	127,786	142,203	171,420	186,570	0	47,644	128,276	10,650
35 Mt. Sinai School of Medicine	127,765	149,846	176,946	185,335	0	64,867	120,468	0

See explanatory information and SOURCE at end of table.

TABLE B-58. R&D expenditures in the life sciences at universities and colleges, ranked by fiscal year 2002 R&D expenditures in the life sciences: fiscal years 1999--2002 and by subfield for fiscal year 2002

(Dollars in thousands)

Institution and ranking	1999	2000	2001	2002	2002, by subfield			
					Agri-cultural sciences	Biological sciences	Medical sciences	Other
36 MI State U.	130,392	147,286	163,803	179,521	77,002	78,263	21,232	3,024
37 IN U. all campuses	119,441	131,540	149,353	179,224	0	55,554	116,922	6,748
38 U. of Medicine and Dentistry NJ	126,277	140,951	162,417	178,156	0	69,481	108,675	0
39 NY U.	136,329	147,489	152,633	177,019	0	49,904	88,315	38,800
40 U. Cincinnati all campuses	115,975	135,543	154,214	176,777	0	58,584	112,288	5,905
Total, 1st 40 institutions	8,401,393	9,458,738	10,593,933	11,831,770	687,181	3,140,641	7,607,186	396,762
41 U. Chicago	108,200	121,687	147,810	176,233	0	57,812	117,468	953
42 U. Rochester	110,841	124,571	156,659	175,565	0	46,447	121,966	7,152
43 Case Western Reserve U.	143,074	153,776	153,369	171,688	0	51,428	119,958	302
44 U. CA Berkeley	173,208	219,128	165,525	170,348	70,036	59,935	40,377	0
45 LA State U. all campuses	130,209	147,295	160,836	168,782	56,460	70,378	41,448	496
46 SUNY Buffalo all campuses	105,524	124,168	127,859	168,664	0	50,530	111,091	7,043
47 PA State U. all campuses	101,867	147,340	148,925	163,590	73,977	29,379	59,892	342
48 Vanderbilt U.	117,715	137,734	150,059	162,125	0	82,878	74,042	5,205
49 Wayne State U.	114,217	120,701	140,180	159,013	0	2,955	152,591	3,467
50 Yeshiva U.	111,771	139,618	148,230	157,124	0	38,087	85,696	33,341
Total, 1st 50 institutions	9,618,019	10,894,756	12,093,385	13,504,902	887,654	3,630,470	8,531,715	455,063
51 U. KY all campuses	126,650	145,901	154,696	156,833	39,354	48,463	63,885	5,131
52 Rockefeller U.	115,715	117,079	136,413	155,753	0	150,571	5,182	0
53 TX A&M U. all campuses	164,646	146,600	153,264	155,557	72,545	32,584	50,428	0
54 OR Health Sciences U.	116,422 i	126,445	131,290	152,379e	0e	48,304e	90,513e	13,562e
55 NC State U.	134,338	136,438	145,775	148,461	75,524	68,619	0	4,318
56 U. UT	98,011	124,257	130,721	144,575	0	38,450	69,203	36,922
57 U. TX Houston Health Science Ctr.	105,307	119,587	125,439	138,380	0	41,473	87,051	9,856
58 U. CA Irvine	94,991	107,771	117,618	135,406	0	72,281	63,125	0
59 U. South FL	82,586	95,756	116,446	134,360	0	4,067	128,491	1,802
60 U. MA Worcester	83,040	97,587	111,221	132,729	0	44,810	51,616	36,303
Total, 1st 60 institutions	10,739,725	12,112,177	13,416,268	14,959,335	1,075,077	4,180,092	9,141,209	562,957
61 U. MO-Columbia	105,545	112,396	124,701	132,161	57,129	33,340	37,324	4,368
62 Medical U. SC	55,819e	65,243	116,687	132,030	0	38,101	68,454	25,475
63 Boston U.	94,478	103,731	118,512	130,144	0	8,695	119,867	1,582
64 U. TX Health Science Ctr. San Antonio	87,804	103,824	115,154	129,616	0	51,262	78,354	0
65 Purdue U. all campuses	101,479	106,891	116,206	128,926	49,270	56,102	17,327	6,227
66 U. TX Medical Branch Galveston	92,274	96,406	100,926	127,188	0	67,922	59,266	0
67 U. VA all campuses	82,763	91,269	98,876	123,266	0	56,922	65,520	824
68 U. IL Urbana-Champaign	87,213	97,752	109,062	121,383	53,955	55,283	8,773	3,372
69 U. KS all campuses	82,370	95,317	104,210	121,057	332	57,182	41,149	22,394
70 U. CT all campuses	81,970	97,825	100,474	119,232	8,539	45,972	61,609	3,112
Total, 1st 70 institutions	11,611,440	13,082,831	14,521,076	16,224,338	1,244,302	4,650,873	9,698,852	630,311
71 Rutgers The State U. NJ all campuses	97,017	99,301	106,092	118,490	37,843	42,791	23,926	13,930
72 U. Miami	97,838	103,472	107,753	117,760	0	24,726	92,920	114
73 U. TN system	92,957	95,074	90,646	114,256	32,406	40,798	39,112	1,940
74 Wake Forest U.	81,220	85,675	96,131	108,994	0	576	108,418	0
75 Thomas Jefferson U.	78,410	89,626	88,936	102,974	0	54,459	46,854	1,661

See explanatory information and SOURCE at end of table.

TABLE B-58. R&D expenditures in the life sciences at universities and colleges, ranked by fiscal year 2002 R&D expenditures in the life sciences: fiscal years 1999--2002 and by subfield for fiscal year 2002

(Dollars in thousands)

Institution and ranking	1999	2000	2001	2002	2002, by subfield			
					Agri-cultural sciences	Biological sciences	Medical sciences	Other
76 VA Polytechnic Institute & State U.	73,781	84,265	94,248	101,588	69,338	16,454	5,817	9,979
77 Medical C. WI	61,446	70,581	83,857	96,700	0	39,154	57,546	0
78 SUNY Stony Brook all campuses	79,447	89,558	95,885	96,549	0	51,118	44,139	1,292
79 VA Commonwealth U.	69,763	75,323	85,501	95,536	0	32,772	58,493	4,271
80 OR State U.	83,992	82,485	89,498	94,684	57,748	31,947	2,652	2,337
Total, 1st 80 institutions	12,427,311	13,958,191	15,459,623	17,271,869	1,441,637	4,985,668	10,178,729	665,835
81 IA State U.	78,037	79,334	87,087	93,870	49,398	35,378	8,792	302
82 Georgetown U.	98,480e	119,611	90,273	87,245	0	7,460	78,926	859
83 Dartmouth C.	53,543	59,803	74,490	86,943	0	3,881	83,062	0
84 Tulane U.	72,140	70,301	76,704	85,598	0	16,194	31,918	37,486
85 U. NE Lincoln	62,623	64,285	79,194	84,711	47,055	34,091	0	3,565
86 Tufts U.	80,592	83,227	84,659	84,507	0	74,421	10,034	52
87 U. VT	56,013	56,067	66,357	79,952	6,284	28,718	38,070	6,880
88 MS State U.	65,748	75,070	79,165	79,575	70,570	2,414	6,087	504
89 Rush U.	58,166	67,122	68,935	77,581	0	14,807	60,344	2,430
90 MA Institute of Technology	66,924	73,228	77,062	74,762	30	55,993	17,729	1,010
Total, 1st 90 institutions	13,119,577	14,706,239	16,243,549	18,106,613	1,614,974	5,259,025	10,513,691	718,923
91 U. NM all campuses	36,824	46,280	62,419	72,901	0	36,040	24,841	12,020
92 U. OK all campuses	62,471	63,984	66,128	71,181	0	30,906	38,007	2,268
93 U. NE Medical Ctr.	54,205	51,547	60,695	71,000	0	39,917	30,817	266
94 WA State U.	65,632	70,714	71,436	70,907	23,963	40,132	3,252	3,560
95 CO State U.	96,230	96,098	89,852	69,291	37,964	21,084	9,760	483
96 KS State U.	56,739	59,728	60,229	68,452	46,169	21,876	407	0
97 Auburn U. all campuses	51,324	56,273	58,552	65,769	45,086	13,528	3,851	3,304
98 U. Louisville	42,131	49,922	56,292	64,124	28	11,075	49,716	3,305
99 U. CA Riverside	45,241	47,470	60,284	59,043	44,635	11,449	2,959	0
100 U. HI Manoa	62,503	63,662	58,455	58,286	13,194	6,380	21,625	17,087
Total, 1st 100 institutions	13,692,877	15,311,917	16,887,891	18,777,567	1,826,013	5,491,412	10,698,926	761,216
101 Brown U.	34,242	38,501	42,396	56,523	0 i	6,332 i	38,880 i	11,311 i
102 U. MD College Park	35,966	37,526	47,443	56,410	37,239	8,973	0	10,198
103 OK State U. all campuses	45,141	49,269	50,096	54,332	29,857	19,601	4,523	351
104 U. AR main campus	43,733	47,239	51,556	52,830	50,233	1,493	0	1,104
105 Medical C. GA	41,103	45,596	52,191	51,705	0	29,913	21,718	74
106 ND State U. all campuses	33,813	37,124	48,943	51,677	46,754	2,421	2,502	0
107 U. ID	40,633	39,812	42,957	50,861	38,056	8,977	3,828	0
108 Clemson U.	54,023	62,486	50,058	50,676	34,662	14,350	1,664	0
109 TX A&M U. System Health Science Ctr.	--	25,719	40,693	49,014	0	0	49,014	0
110 Charles R. Drew U. of Medicine & Science	24,484	31,045	36,717	48,839	0	0	48,839	0
Total, 1st 110 institutions	14,046,015	15,726,234	17,350,941	19,300,434	2,062,814	5,583,472	10,869,894	784,254
111 WV U.	33,247	32,628	43,380	48,372	9,460	12,224	25,483	1,205
112 MT State U.-Bozeman	33,283	39,492	42,114	47,193	34,363	12,144	22	664
113 U. AR for Medical Sciences	44,066	49,074	51,921	45,046	0	10,397	34,649	0
114 George Washington U.	23,269	23,310	36,149	42,278	0	15,676	26,602	0
115 Temple U.	39,957	30,675	36,228	39,678	21	18,025	19,840	1,792

See explanatory information and SOURCE at end of table.

TABLE B-58. R&D expenditures in the life sciences at universities and colleges, ranked by fiscal year 2002 R&D expenditures in the life sciences: fiscal years 1999--2002 and by subfield for fiscal year 2002

(Dollars in thousands)

Institution and ranking	1999	2000	2001	2002	2002, by subfield			
					Agri-cultural sciences	Biological sciences	Medical sciences	Other
116 U. TX Austin	30,561	39,125	41,544	39,495	118	22,675	15,088	1,614
117 CA Institute of Technology	26,791	31,931	33,779	37,600	0	37,600	0	0
118 UT State U.	33,636	35,626	34,166	37,392	23,550	7,339	6,503	0
119 MCP Hahnemann U.	27,254	41,267	31,938	37,323	0	15,234	17,905	4,184
120 TX Tech U.	24,337	27,413	31,241	36,628	11,965	14,938	8,670	1,055
Total, 1st 120 institutions	14,362,416	16,076,775	17,733,401	19,711,439	2,142,291	5,749,724	11,024,656	794,768
121 U. MS all campuses	22,614 i	25,918	31,721 i	36,246 i	0 i	8,373 i	27,255 i	618 i
122 SUNY Albany	38,486	55,159	41,335	35,182	0	35,182	0	0
123 SUNY Health Science Ctr. Brooklyn	28,840	31,626	31,626e	34,981 i	0 i	20,681 i	14,223 i	77 i
124 U. NV, Reno	18,855	26,014	31,445	34,621	12,214	16,219	5,962	226
125 St. Louis U. all campuses	27,118	29,888	31,328	34,241	0	13,892	15,358	4,991
126 Southern IL U. Carbondale	18,967	23,401	25,714	34,114	11,040	5,795	16,569	710
127 Loyola U. (Chicago, IL)	25,799	25,087	30,351	33,352	0	18,584	14,206	562
128 U. SC all campuses	23,387	24,371	27,153	33,200	0	5,965	25,263	1,972
129 U. LA Lafayette	14,834	18,167	18,550	30,367	608	3,465	25,627	667
130 U. MA Amherst	26,596	32,453	29,894	30,158	11,073	15,949	905	2,231
Total, 1st 130 institutions	14,607,912	16,368,859	18,032,518	20,047,901	2,177,226	5,893,829	11,170,024	806,822
131 Princeton U.	19,429	23,185	26,431	29,180	0	29,180	0	0
132 U. PR Medical Sciences Campus	17,114	21,373	23,913	29,089	0	0	29,089	0
133 Uniformed Services U. of the Health Sciences	22,898	23,987	23,247	28,630	0	10,519	18,111	0
134 Eastern VA Medical School	24,096	23,299	26,250	28,572	0	7,166	21,296	110
135 U. MT, The	16,707	20,509	23,287	26,908	8,505	10,035	6,600	1,768
136 U. MD Biotechnology Institute	23,425	22,504	24,392	25,882	6,483	19,107	0	292
137 NY Medical C.	20,436	23,348	24,283	25,222	0	17,380	7,842	0
138 U. NH	12,765	13,556	15,501	24,591	11,997	10,360	0	2,234
139 San Diego State U.	19,928	20,629	22,063	24,271	0	11,582	10,829	1,860
140 Howard U.	13,457	16,400	19,534	24,138	0	14,402	9,736	0
Total, 1st 140 institutions	14,798,167	16,577,649	18,261,419	20,314,384	2,204,211	6,023,560	11,273,527	813,086
141 Morehouse School of Medicine	13,622	16,889	19,670	23,956	0	9,320	14,636	0
142 NM State U. all campuses	17,582	19,165	20,202	23,139	19,339	3,721	9	70
143 SUNY Upstate Medical U.	15,099	17,095	17,294	22,326	0	6,136	16,190	0
144 U. AK Fairbanks all campuses	17,234	19,887	16,601	22,224	9,226	12,998	0	0
145 Brandeis U.	20,127	20,159	22,902	21,187	0	21,187	0	0

See explanatory information and SOURCE at end of table.

TABLE B-58. R&D expenditures in the life sciences at universities and colleges, ranked by fiscal year 2002 R&D expenditures in the life sciences: fiscal years 1999--2002 and by subfield for fiscal year 2002

(Dollars in thousands)

Institution and ranking	1999	2000	2001	2002	2002, by subfield			
					Agri-cultural sciences	Biological sciences	Medical sciences	Other
146 U. DE	17,348	20,227	21,871	20,921	14,590	5,111	0	1,220
147 Meharry Medical C.	9,133	9,133e	14,467 i	20,508	0	18,406	2,102	0
148 U. WY	21,491	17,512	19,715	19,715e	11,745e	7,316e	654e	0e
149 U. ME	16,742	18,431	23,912	19,654	10,667	8,944	43	0
150 Loma Linda U.	18,818	21,488	21,325 i	19,545	0	7,927	11,133	485
Total, 1st 150 institutions	14,965,363	16,757,635	18,459,378	20,527,559	2,269,778	6,124,626	11,318,294	814,861
Total, all other sampled institutions	663,669	709,899	753,425	876,613	164,113	452,959	186,411	73,130

-- = not available.
e = estimated.
i = imputed.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-59. Federally financed R&D expenditures in the life sciences at universities and colleges, ranked by fiscal year 2002 federally financed R&D expenditures in the life sciences: fiscal years 1999--2002 and by subfield for fiscal year 2002

(Dollars in thousands)

Institution and ranking	1999	2000	2001	2002	2002, by subfield			
					Agri-cultural sciences	Biological sciences	Medical sciences	Other
Total, all institutions	8,953,776	10,063,590	11,195,048	12,852,020	685,686	4,406,305	7,230,513	529,516
1 Johns Hopkins U., The [1]	281,249	305,404	347,565	406,785	0	98,084	282,113	26,588
2 U. WA	246,803	268,355	299,001	341,857	13,028	93,957	218,691	16,181
3 U. PA	227,734	259,136	296,706	332,825	607	125,800	196,534	9,884
4 U. CA San Francisco	233,181	239,282	265,865	306,478	0	42,676	263,802	0
5 Washington U. St. Louis	191,983	228,233	256,345	273,418	0	130,449	138,263	4,706
6 U. Pittsburgh all campuses	167,748	198,076	234,847	270,083	0	10,470	251,920	7,693
7 U. CA Los Angeles	169,502	188,919	223,320	266,260	135	13,981	247,311	4,833
8 Harvard U.	183,218	213,775	232,400	261,863	0	70,557	190,970	336
9 Baylor C. of Medicine	141,111	193,249	234,394	259,475	0	165,271	94,204	0
10 Columbia U. in the City of New York	153,549	185,106	212,271	242,713	0	92,131	148,940	1,642
Total, 1st 10 institutions	1,996,078	2,279,535	2,602,714	2,961,757	13,770	843,376	2,032,748	71,863
11 U. MI all campuses	181,276	200,003	212,732	240,123	2,241	72,384	132,419	33,079
12 Yale U.	183,022	202,801	215,209	238,151	1,122	83,427	153,602	0
13 Stanford U.	174,195	199,298	214,486	235,353	0	13,389	221,964	0
14 U. MN all campuses	147,646	163,831	187,638	220,412	18,134	35,943	159,548	6,787
15 Duke U.	143,274	159,656	171,792	207,083	0	51,181	155,482	420
16 U. AL Birmingham, The	153,179	162,927	182,745	203,111	0	61,924	138,804	2,383
17 U. NC Chapel Hill	138,631	150,606	172,779	190,527	0	81,988	99,906	8,633
18 U. WI Madison	133,809	148,172	158,022	183,930	14,792	71,057	96,547	1,534
19 U. CO all campuses	116,014	136,720	149,083	181,759	0	50,116	126,065	5,578
20 U. CA San Diego	135,740	155,250	163,951	178,800	0	32,803	145,766	231
Total, 1st 20 institutions	3,502,864	3,958,799	4,431,151	5,041,006	50,059	1,397,588	3,462,851	130,508
21 Emory U.	126,500	137,489	162,073	178,546	0	46,403	95,171	36,972
22 Cornell U. all campuses	115,982	125,344	144,510	163,939	18,729	41,772	103,438	0
23 U. TX Southwestern Medical Ctr. Dallas	101,996	109,165	131,820	155,258	0	68,565	86,083	610
24 Case Western Reserve U.	114,553	125,924	133,371	154,729	0	43,858	110,871	0
25 U. IA	96,891	112,862	125,891	147,461	0	34,900	95,369	17,192
26 U. Chicago	91,591	97,251	115,766	141,164	0	46,532	93,985	647
27 Vanderbilt U.	91,369	103,565	117,681	138,209	0	73,480	60,056	4,673
28 U. Southern CA	94,480	103,260	120,682	134,335	0	4,825	121,590	7,920
29 U. Cincinnati all campuses	83,303	94,624	112,087	133,431	0	45,530	86,758	1,143
30 Mt. Sinai School of Medicine	84,624	98,188	109,344	125,979	0	44,061	81,918	0
Total, 1st 30 institutions	4,504,153	5,066,471	5,704,376	6,514,057	68,788	1,847,514	4,398,090	199,665
31 U. Rochester	75,975	88,295	104,254	125,388	0	38,736	82,217	4,435
32 OR Health Sciences U.	91,835 i	104,185	106,328	123,979e	0e	44,880e	67,445e	11,654e
33 U. CA Davis	98,784	109,978	106,675	123,169	25,683	45,283	52,203	0
34 U. AZ	80,174	89,978	105,356	118,710	17,081	41,453	58,334	1,842
35 Northwestern U.	82,942	96,823	104,710	117,218	0	44,069	67,934	5,215

See explanatory information and SOURCE at end of table.

TABLE B-59. Federally financed R&D expenditures in the life sciences at universities and colleges, ranked by fiscal year 2002 federally financed R&D expenditures in the life sciences: fiscal years 1999--2002 and by subfield for fiscal year 2002

(Dollars in thousands)

Institution and ranking	1999	2000	2001	2002	2002, by subfield			
					Agri-cultural sciences	Biological sciences	Medical sciences	Other
36 U. MD Baltimore	84,516	91,212	99,091	117,017	0	17,552	93,614	5,851
37 NY U.	89,173	93,890	101,365	114,924	0	38,575	48,019	28,330
38 Yeshiva U.	89,680	101,631	107,800	114,268	0	27,699	62,322	24,247
39 Boston U.	80,675	88,405	100,993	113,936	0	8,041	104,378	1,517
40 U. TX M. D. Anderson Cancer Ctr.	66,016	77,963	88,823	110,299	0	47,848	62,451	0
Total, 1st 40 institutions	5,343,923	6,008,831	6,729,771	7,692,965	111,552	2,201,650	5,097,007	282,756
41 OH State U. all campuses	77,926	79,507	94,278	109,006	8,138	32,995	54,837	13,036
42 U. IL Chicago	67,001	76,932	96,837	107,963	0	30,954	70,015	6,994
43 U. VA all campuses	67,715	75,640	81,774	103,220	0	47,503	55,053	664
44 U. FL	75,556	72,971	81,772	101,313	21,597	32,642	43,470	3,604
45 U. TX Houston Health Science Ctr.	71,288	79,665	88,545	98,676	0	30,794	65,234	2,648
46 IN U. all campuses	70,151	74,949	82,786	96,579	0	36,421	56,887	3,271
47 U. UT	68,423	81,091	83,618	95,799	0	27,592	52,553	15,654
48 U. MA Worcester	55,516	64,212	79,453	93,992	0	40,556	41,948	11,488
49 U. of Medicine and Dentistry NJ	61,730	75,318	86,054	90,235	0	45,117	45,118	0
50 Wake Forest U.	59,351	65,094	76,951	90,127	0	546	89,581	0
Total, 1st 50 institutions	6,018,580	6,754,210	7,581,839	8,679,875	141,287	2,526,770	5,671,703	340,115
51 SUNY Buffalo all campuses	57,307	67,966	67,588	89,183	0	33,120	51,992	4,071
52 U. CA Berkeley	64,757	76,937	82,235	85,063	19,801	44,598	20,664	0
53 U. TX Health Science Ctr. San Antonio	56,904	65,251	71,153	83,761	0	36,377	47,384	0
54 PA State U. all campuses	56,182	68,343	67,800	82,591	17,139	17,173	48,076	203
55 Georgetown U.	76,707	92,084	85,315	79,374	0	7,115	71,520	739
56 Thomas Jefferson U.	56,369	67,448	64,881	79,217	0	46,331	31,491	1,395
57 U. CA Irvine	48,827	61,177	67,873	78,246	0	49,434	28,812	0
58 Wayne State U.	47,371	52,637	64,031	77,350	0	1,982	73,575	1,793
59 U. TX Medical Branch Galveston	54,759	60,749	63,917	77,093	0	41,297	35,796	0
60 Medical C. WI	47,087	55,034	64,003	76,241	0	30,870	45,371	0
Total, 1st 60 institutions	6,584,850	7,421,836	8,280,635	9,487,994	178,227	2,835,067	6,126,384	348,316
61 Medical U. SC	30,997	41,432	60,543	75,803	0	28,954	34,285	12,564
62 U. Miami	63,869	68,262	70,619	72,837	0	18,534	54,257	46
63 MI State U.	49,996	51,536	59,016	69,114	19,135	37,175	11,333	1,471
64 U. KY all campuses	46,622	50,133	60,341	66,199	5,330	30,439	27,765	2,665
65 U. CT all campuses	38,767	46,875	48,914	64,292	3,471	31,630	27,925	1,266
66 Rockefeller U.	42,689	42,109	51,317	62,725	0	57,543	5,182	0
67 Tufts U.	53,302	54,306	61,006	62,033	0	56,575	5,458	0
68 Dartmouth C.	35,707	41,537	47,443	60,892	0	3,089	57,803	0
69 U. KS all campuses	38,866	46,879	54,887	60,391	203	29,601	22,193	8,394
70 U. MO-Columbia	37,318	45,496	48,950	59,480	20,495	18,723	17,415	2,847
Total, 1st 70 institutions	7,022,983	7,910,401	8,843,671	10,141,760	226,861	3,147,330	6,390,000	377,569
71 U. GA	42,100	47,290	49,294	59,143	17,165	38,075	3,707	196
72 MA Institute of Technology	49,466	55,109	59,054	58,047	30	45,324	11,896	797
73 SUNY Stony Brook all campuses	48,971	51,701	50,667	57,809	0	34,044	23,156	609
74 VA Commonwealth U.	42,593	45,047	48,836	56,343	0	22,644	31,164	2,535
75 U. TN system	38,605	43,256	44,255	55,777	2,287	31,797	20,799	894

See explanatory information and SOURCE at end of table.

TABLE B-59. Federally financed R&D expenditures in the life sciences at universities and colleges, ranked by fiscal year 2002 federally financed R&D expenditures in the life sciences: fiscal years 1999--2002 and by subfield for fiscal year 2002

(Dollars in thousands)

Institution and ranking	1999	2000	2001	2002	2002, by subfield			
					Agri-cultural sciences	Biological sciences	Medical sciences	Other
76 LA State U. all campuses	42,673	47,916	50,635	55,052	4,831	35,869	14,194	158
77 U. VT	31,432	35,632	43,959	53,274	2,683	22,132	25,532	2,927
78 Tulane U.	41,482	40,122	41,666	53,127	0	10,167	11,838	31,122
79 U. South FL	21,731	29,878	35,731	52,194	0	2,081	49,329	784
80 U. NM all campuses	29,014	38,214	41,371	50,121	0	28,512	18,423	3,186
Total, 1st 80 institutions	7,411,050	8,344,566	9,309,139	10,692,647	253,857	3,417,975	6,600,038	420,777
81 Purdue U. all campuses	34,525	35,919	41,501	48,077	9,592	27,640	7,262	3,583
82 U. IL Urbana-Champaign	33,684	37,004	39,942	45,822	12,482	29,774	3,115	451
83 Rush U.	30,034	32,178	36,405	43,387	0	8,695	32,570	2,122
84 TX A&M U. all campuses	43,653	37,616	40,985	42,784	18,329	9,554	14,901	0
85 OR State U.	38,305	35,793	36,364	40,042	21,746	15,184	1,187	1,925
86 Charles R. Drew U. of Medicine & Science	22,212	21,969	27,415	39,259	0	0	39,259	0
87 CO State U.	56,063	62,328	48,151	38,463	20,544	10,719	6,942	258
88 U. HI Manoa	36,536	38,123	36,896	38,014	5,598	3,088	17,277	12,051
89 Rutgers The State U. NJ all campuses	26,225	28,157	30,684	37,573	8,258	15,630	11,767	1,918
90 Brown U.	21,568	26,011	29,599	37,427	0 i	3,603 i	25,600 i	8,224 i
Total, 1st 90 institutions	7,753,855	8,699,664	9,677,081	11,103,495	350,406	3,541,862	6,759,918	451,309
91 CA Institute of Technology	26,077	28,580	31,553	35,134	0	35,134	0	0
92 U. OK all campuses	28,928	25,532	28,057	33,659	0	17,608	14,260	1,791
93 WA State U.	27,895	29,653	29,223	32,076	9,321	19,897	570	2,288
94 NC State U.	21,277	27,299	34,246	31,918	10,198	19,689	0	2,031
95 IA State U.	21,345	22,669	25,448	31,898	13,053	13,680	4,922	243
96 SUNY Albany	34,434	50,670	35,658	30,396	0	30,396	0	0
97 St. Louis U. all campuses	23,239	25,809	27,229	30,220	0	12,312	13,406	4,502
98 U. Louisville	11,227	13,668	19,988	30,070	0	5,660	23,962	448
99 U. NE Medical Ctr.	17,167	19,878	22,497	28,602	0	17,966	10,636	0
100 Temple U.	21,570	23,947	25,133	27,561	0	13,270	12,725	1,566
Total, 1st 100 institutions	7,987,014	8,967,369	9,956,113	11,415,029	382,978	3,727,474	6,840,399	464,178
101 U. TX Austin	20,222	24,953	27,681	27,544	0	15,482	10,511	1,551
102 U. AR for Medical Sciences	26,392	29,962	34,219	27,491	0	7,584	19,907	0
103 U. MD College Park	12,280	11,573	16,447	26,381	13,956	7,627	0	4,798
104 MCP Hahnemann U.	17,039	27,127	22,599	26,247	0	13,354	9,671	3,222
105 George Washington U.	15,349	14,073	23,062	25,815	0	11,392	14,423	0
106 SUNY Health Science Ctr. Brooklyn	21,053	22,860	22,860e	25,495 i	0 i	16,829 i	8,666 i	0 i
107 Loyola U. (Chicago, IL)	15,904	16,720	21,694	24,788	0	15,558	8,885	345
108 MS State U.	17,460	21,170	22,869	24,262	21,962	969	1,163	168
109 U. NE Lincoln	14,120	14,269	20,905	23,933	10,498	12,603	0	832
110 U. PR Medical Sciences Campus	13,971	16,657	19,433	23,931	0	0	23,931	0
Total, 1st 110 institutions	8,160,804	9,166,733	10,187,882	11,670,916	429,394	3,828,872	6,937,556	475,094

See explanatory information and SOURCE at end of table.

TABLE B-59. Federally financed R&D expenditures in the life sciences at universities and colleges, ranked by fiscal year 2002 federally financed R&D expenditures in the life sciences: fiscal years 1999--2002 and by subfield for fiscal year 2002

(Dollars in thousands)

Institution and ranking	1999	2000	2001	2002	2002, by subfield			
					Agri-cultural sciences	Biological sciences	Medical sciences	Other
111 VA Polytechnic Institute & State U.	18,472	20,481	22,598	23,715	13,849	7,026	1,628	1,212
112 U. MS all campuses	12,027 i	13,333	18,639 i	23,377 i	0 i	5,661 i	17,157 i	559 i
113 Howard U.	12,248	15,284	18,240	23,343	0	13,869	9,474	0
114 Medical C. GA	13,991	15,210	21,116	23,317	0	13,461	9,804	52
115 KS State U.	14,633	15,941	16,563	22,875	10,132	12,635	108	0
116 WV U.	10,603	13,420	15,671	22,211	4,408	6,228	11,348	227
117 TX A&M U. System Health Science Ctr.	--	14,314	18,335	22,104	0	0	22,104	0
118 Morehouse School of Medicine	12,948	15,419	18,127	21,919	0	9,024	12,895	0
119 Princeton U.	13,148	15,571	17,546	21,380	0	21,380	0	0
120 Meharry Medical C.	8,865	8,865e	14,305 i	20,453	0	18,356	2,097	0
Total, 1st 120 institutions	8,277,739	9,314,571	10,369,022	11,895,610	457,783	3,936,512	7,024,171	477,144
121 U. NV, Reno	12,467	13,435	16,950	20,390	2,206	13,420	4,570	194
122 NY Medical C.	14,029	17,975	18,344	19,318	0	13,933	5,385	0
123 MT State U.-Bozeman	12,751	14,484	16,155	19,161	10,726	7,875	0	560
124 U. ID	16,173	12,180	14,206	18,866	13,106	4,441	1,319	0
125 Auburn U. all campuses	9,971	12,106	15,444	18,519	9,560	4,939	1,337	2,683
126 UT State U.	14,747	16,066	14,796	18,448	11,354	2,530	4,564	0
127 U. MT, The	11,368	13,772	14,417	17,789	5,069	6,511	4,894	1,315
128 Loma Linda U.	12,217	15,930	16,604 i	17,011	0	7,117	9,530	364
129 U. MA Amherst	10,892	12,934	14,740	15,946	5,025	9,876	353	692
130 U. OR	12,169	15,174	16,016	15,678	0	6,733	8,945	0
Total, 1st 130 institutions	8,404,523	9,458,627	10,526,694	12,076,736	514,829	4,013,887	7,065,068	482,952
131 Brandeis U.	14,534	14,241	17,263	15,482	0	15,482	0	0
132 U. AK Fairbanks all campuses	6,254	8,412	14,575	14,959	6,632	8,327	0	0
133 U. SC all campuses	12,433	14,074	14,110	14,948	0	3,147	10,826	975
134 Clemson U.	14,718	17,023	15,698	14,802	8,607	6,031	164	0
135 U. CA Riverside	7,511	7,696	12,700	13,784	6,727	5,154	1,903	0
136 U. South AL	8,456e	6,924	6,924e	13,567	0	3,650	9,917	0
137 SUNY Upstate Medical U.	7,889	8,461	8,815	13,404	0	5,357	8,047	0
138 San Diego State U.	10,643	10,332	11,931	13,317	0	6,544	6,140	633
139 U. AR main campus	8,939	10,059	10,704	13,170	11,268	1,148	0	754
140 OK State U. all campuses	9,637	11,709	11,395	13,150	5,962	5,896	1,219	73
Total, 1st 140 institutions	8,505,537	9,567,558	10,650,809	12,217,319	554,025	4,074,623	7,103,284	485,387
141 Eastern VA Medical School	11,354	12,114	11,389	13,077	0	4,938	8,139	0
142 Medical C. OH	9,219	9,944	11,362	12,006	0	8,974	2,829	203
143 TX Tech U.	5,595	6,837	8,865	11,254	2,175	7,876	644	559
144 AZ State U. main campus	7,285	7,705	8,385	10,589	626	8,052	0	1,911
145 Wright State U. all campuses	8,241	8,064	10,229	10,321	0	819	9,495	7

See explanatory information and SOURCE at end of table.

TABLE B-59. Federally financed R&D expenditures in the life sciences at universities and colleges, ranked by fiscal year 2002 federally financed R&D expenditures in the life sciences: fiscal years 1999--2002 and by subfield for fiscal year 2002

(Dollars in thousands)

Institution and ranking	1999	2000	2001	2002	2002, by subfield			
					Agri-cultural sciences	Biological sciences	Medical sciences	Other
146 Uniformed Services U. of the Health Sciences	9,696	11,023	10,105	10,294	0	3,783	6,511	0
147 U. of the VI	1,954e	1,954e	6,009 i	10,037 i	7,532 i	1,705 i	503 i	297 i
148 NM State U. all campuses	6,855	7,511	8,211	9,898	7,190	2,700	8	0
149 U. RI	7,132	8,541	7,705	9,568	5,431	1,419	1,469	1,249
150 U. LA Lafayette	2,840	8,190	8,311	9,019	32	1,733	7,061	193
Total, 1st 150 institutions	8,575,708	9,649,441	10,741,380	12,323,382	577,011	4,116,622	7,139,943	489,806
Total, all other sampled institutions	378,068	414,149	453,668	528,638	108,675	289,683	90,570	39,710

[1] Johns Hopkins University includes the Applied Physics Laboratory.

-- = not available.
e = estimated.
i = imputed.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-60. Total and federally financed R&D expenditures in the agricultural sciences at universities and colleges, ranked by fiscal year 2002 total R&D expenditures in the agricultural sciences: fiscal years 1999--2002

(Dollars in thousands)

Institution and ranking	Total				Federally financed			
	1999	2000	2001	2002	1999	2000	2001	2002
Total, all institutions	2,035,689	2,177,088	2,326,059	2,433,891	545,033	577,929	617,625	685,686
1 U. CA Davis	104,295	128,145	105,152	111,445	28,573	34,870	22,873	25,683
2 U. FL	87,218	87,305	102,240	106,650	12,776	12,857	16,767	21,597
3 U. GA	75,994	87,415	89,594	88,620	12,238	14,600	14,501	17,165
4 MI State U.	58,591	61,454	68,798	77,002	12,697	12,575	14,722	19,135
5 NC State U.	72,724	70,131	73,787	75,524	8,152	10,169	9,968	10,198
6 PA State U. all campuses	23,190	63,436	70,405	73,977	6,099	14,236	14,680	17,139
7 TX A&M U. all campuses	57,792	66,793	69,231	72,545	14,068	14,226	17,270	18,329
8 MS State U.	57,964	68,358	72,172	70,570	16,490	20,283	21,628	21,962
9 U. CA Berkeley	26,553	27,948	68,053	70,036	2,822	2,957	18,182	19,801
10 Cornell U. all campuses	48,153	52,517	64,188	69,355	12,719	13,758	17,221	18,729
Total, 1st 10 institutions	612,474	713,502	783,620	815,724	126,634	150,531	167,812	189,738
11 VA Polytechnic Institute & State U.	59,805	63,870	68,669	69,338	14,411	14,440	14,207	13,849
12 U. MN all campuses	58,619	60,482	68,399	65,828	10,790	13,217	14,696	18,134
13 OR State U.	55,105	52,052	56,223	57,748	25,608	21,950	21,261	21,746
14 U. MO-Columbia	48,200	48,455	52,127	57,129	13,752	17,318	15,542	20,495
15 LA State U. all campuses	52,601	54,345	55,497	56,460	4,476	4,268	5,617	4,831
16 U. IL Urbana-Champaign	45,334	48,239	50,984	53,955	9,814	11,049	11,668	12,482
17 U. AZ	45,495	46,745	49,212	53,026	14,366	13,887	15,380	17,081
18 U. AR main campus	42,254	45,525	48,697	50,233	8,347	8,968	9,170	11,268
19 IA State U.	40,154	42,644	48,689	49,398	9,416	10,250	11,822	13,053
20 Purdue U. all campuses	38,538	42,348	43,419	49,270	9,052	9,863	8,567	9,592
Total, 1st 20 institutions	1,098,579	1,218,207	1,325,536	1,378,109	246,666	275,741	295,742	332,269
21 U. NE Lincoln	40,257	40,692	46,128	47,055	8,323	8,368	10,472	10,498
22 ND State U. all campuses	31,589	33,003	45,518	46,754	3,592	4,556	4,514	5,264
23 KS State U.	41,091	43,595	43,352	46,169	7,505	8,558	8,562	10,132
24 Auburn U. all campuses	37,693	40,941	38,916	45,086	6,111	7,952	8,791	9,560
25 U. CA Riverside	21,974	24,419	23,315	44,635	2,209	2,334	3,470	6,727
26 U. WI Madison	33,223	38,597	40,912	41,943	8,305	10,572	12,757	14,792
27 U. KY all campuses	52,996	56,606	56,652	39,354	8,197	8,506	9,160	5,330
28 U. ID	33,437	31,765	33,879	38,056	12,234	9,111	10,733	13,106
29 CO State U.	56,396	57,129	63,426	37,964	32,246	38,093	35,204	20,544
30 Rutgers The State U. NJ all campuses	32,266	34,199	37,103	37,843	6,243	6,934	8,741	8,258
Total, 1st 30 institutions	1,479,501	1,619,153	1,754,737	1,802,968	341,631	380,725	408,146	436,480
31 OH State U. all campuses	45,548	44,558	40,794	37,255	13,773	6,821	8,134	8,138
32 U. MD College Park	25,565	18,670	29,836	37,239	5,088	2,766	6,657	13,956
33 Clemson U.	23,451	27,124	37,620	34,662	6,389	7,389	11,174	8,607
34 MT State U.-Bozeman	24,454	29,341	31,020	34,363	6,994	8,375	9,538	10,726
35 U. TN system	30,481	28,762	24,050	32,406	5,443	5,684	2,248	2,287
36 OK State U. all campuses	26,327	26,625	27,169	29,857	4,316	4,509	4,412	5,962
37 WA State U.	22,959	25,070	26,130	23,963	7,292	7,785	8,707	9,321
38 UT State U.	22,692	22,774	21,080	23,550	9,487	10,641	9,168	11,354
39 U. WA	16,516	17,003	19,562	19,525	10,939	10,619	11,453	13,028
40 NM State U. all campuses	15,672	17,331	17,650	19,339	5,456	6,167	6,423	7,190
Total, 1st 40 institutions	1,733,166	1,876,411	2,029,648	2,095,127	416,808	451,481	486,060	527,049

See explanatory information and SOURCE at end of table.

TABLE B-60. Total and federally financed R&D expenditures in the agricultural sciences at universities and colleges, ranked by fiscal year 2002 total R&D expenditures in the agricultural sciences: fiscal years 1999--2002

(Dollars in thousands)

Institution and ranking	Total				Federally financed			
	1999	2000	2001	2002	1999	2000	2001	2002
41 U. DE	14,657	16,566	17,231	14,590	2,335	3,125	4,272	3,210
42 U. HI Manoa	19,409	18,585	13,441	13,194	8,322	8,284	5,354	5,598
43 U. NV, Reno	5,149	10,296	11,564	12,214	2,077	1,352	1,728	2,206
44 U. NH	4,845	4,818	5,689	11,997	1,224	1,186	1,440	2,898
45 TX Tech U.	10,365	11,153	11,705	11,965	1,392	1,400	1,749	2,175
46 U. WY	11,822	13,590	11,745	11,745e	6,570	4,903	4,713	4,713e
47 U. MA Amherst	16,051	13,932	11,275	11,073	5,184	3,603	3,988	5,025
48 Southern IL U. Carbondale	6,116	9,120	8,786	11,040	974	1,827	1,737	1,747
49 U. ME	6,550	7,297	10,066	10,667	2,262	2,896	2,987	3,128
50 SD State U.	10,436	10,857	11,635	10,634	3,419	3,948	3,945	3,347
Total, 1st 50 institutions	1,838,566	1,992,625	2,142,785	2,214,246	450,567	484,005	517,973	561,096
51 AL A&M U.	4,476	3,179	4,624 i	9,945	3,505	2,676	3,369 i	7,364
52 WV U.	7,195	7,566	8,860	9,460	1,510	2,113	2,329	4,408
53 U. AK Fairbanks all campuses	7,374	8,509	7,814	9,226	2,465	3,315	7,283	6,632
54 U. CT all campuses	7,933	9,953	7,881	8,539	1,384	1,723	2,909	3,471
55 U. MT, The	6,135	8,012	7,776	8,505	3,470	4,898	4,180	5,069
56 U. CA Los Angeles	0	0	7,362	7,565	0	0	0	135
57 U. of the VI	1,466e	1,466e	4,510 i	7,553 i	1,466e	1,466e	4,510 i	7,532 i
58 CA State U. Fresno	6,524 i	4,314	3,135	6,807	287 i	451	229	176
59 Northern AZ U.	1,987	2,609	4,160	6,711	695	988	2,442	4,042
60 U. MD Biotechnology Institute	5,599	5,379	6,110	6,483	2,356	2,004	1,901	1,996
Total, 1st 60 institutions	1,887,255	2,043,612	2,205,017	2,295,040	467,705	503,639	547,125	601,921
61 U. VT	5,436	5,203	5,641	6,284	2,500	2,230	2,313	2,683
62 VA State U.	2,297	3,125	3,125	6,244	1,747	2,305	2,305	5,995
63 KY State U.	514e	1,934 i	3,355	6,068	504e	1,768 i	3,014	5,916
64 U. RI	5,648	7,592	5,260	6,061	4,854	6,176	5,115	5,431
65 U. MI all campuses	2,167	4,114	4,313	6,011	600	1,562	1,531	2,241
66 TN State U.	3,821	3,817	3,822	5,370	2,548	2,469	2,427	2,821
67 Prairie View A&M U.	4,209	4,339	6,561	5,213	3,058	2,938	2,837	3,206
68 NC Agricultural and Technical State U.	3,314	3,362	4,544	5,175	2,503	2,574	2,167	3,112
69 TX A&M U. Kingsville	3,651	4,252	4,358	4,994	395	440	235	386
70 MI Technological U.	3,479	3,076	3,800	4,943	2,683	2,454	2,151	2,644
Total, 1st 70 institutions	1,921,791	2,084,426	2,249,796	2,351,403	489,097	528,555	571,220	636,356
71 U. AR Pine Bluff	3,077e	3,482 i	4,229	4,942	2,225e	2,108 i	1,941	2,352
72 FL A&M U.	5,094	4,887	5,605	4,527	4,647	4,335	5,605	4,189
73 SUNY C. of Environmental Science & Forestry	3,887	4,086e	4,228e	3,988 i	516	577e	588e	625 i
74 Langston U.	2,340	2,553	2,863	3,975	2,340	2,553	2,863	3,975
75 Tarleton State U.	1	10	2,530	3,500	0	0	2,485	3,461
76 Alcorn State U.	3,863	5,903	4,735	3,480	3,863	5,903	4,735	3,480
77 Stephen F. Austin State U	3,477	3,927	3,092	3,475	434	458	668	495
78 CA State Polytechnic U. San Luis Obispo	2,197	2,921	2,292	3,371	963	1,082	92	266
79 Lincoln U. (Jefferson City, MO)	2,405	2,207	2,236	3,291	2,405	2,207	2,236	2,513
80 Humboldt State U.	2,448	2,448e	2,767 i	3,148 i	1,580	1,580e	1,769 i	2,017 i
Total, 1st 80 institutions	1,950,580	2,116,850	2,284,373	2,389,100	508,070	549,358	594,202	659,729

See explanatory information and SOURCE at end of table.

TABLE B-60. Total and federally financed R&D expenditures in the agricultural sciences at universities and colleges, ranked by fiscal year 2002 total R&D expenditures in the agricultural sciences: fiscal years 1999--2002

(Dollars in thousands)

Institution and ranking	Total				Federally financed			
	1999	2000	2001	2002	1999	2000	2001	2002
81 Southern U. A&M C. all campuses	2,627	2,552	2,783 i	3,091 i	1,821	2,044	2,248 i	2,518 i
82 U. HI Hilo	--	--	--	3,046	--	--	--	2,100
83 Ft. Valley State U.	2,674	2,520	2,520e	2,931 i	2,268	2,373	2,373e	2,931 i
84 U. GU	1,212	1,957	2,199	2,521	1,201e	1,957	2,199	2,521
85 U. CA Santa Cruz	1,488	1,911	2,141	2,333	30	152	296	345
86 Tuskegee U.	2,121	2,044	2,176	2,292	1,975	1,905	2,030	2,192
87 Yale U.	1,548	1,278	1,609	2,125	752	402	756	1,122
88 Harvey Mudd C.	1,452 i	1,452 i	1,641 i	1,865 i	277 i	277 i	310 i	354 i
89 DE State U.	1,509	2,075	1,383	1,811e	1,143	1,954	1,116	1,478e
90 West TX A&M U.	1,946	1,393	1,299	1,578	6	25	12	105
Total, 1st 90 institutions	1,967,157	2,134,032	2,302,124	2,412,693	517,543	560,447	605,542	675,395
91 U. Northern IA	706	939	1,282	1,542	228	335	345	858
92 U. NC Wilmington	117	532	852	1,273	37	242	367	945
93 AZ State U. main campus	693	1,183	1,327	1,183	320	700	736	626
94 CA State U. Fullerton	456 i	691 i	927 i	1,119 i	281 i	410 i	538 i	670 i
95 U. DC	847	803	1,094	1,117	426	407	440	523
96 IL State U.	762	781 i	993	1,098	0	0 i	0	154
97 U. WI Stevens Point	1,048	718	861	1,073	185	115	130	459
98 U. MA Dartmouth	865	835	659	956	799	582	654	922
99 Western IL U.	1,093	1,138	938	861	420	982	931	855
100 U. PA	301	519	860	831	51	295	837	607
Total, 1st 100 institutions	1,974,045	2,142,171	2,311,917	2,423,746	520,290	564,515	610,520	682,014
Total, all other sampled institutions	61,644	34,917	14,142	10,145	24,743	13,414	7,105	3,672

-- = not available.
e = estimated.
i = imputed.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-61. Total and federally financed R&D expenditures in the biological sciences at universities and colleges, ranked by fiscal year 2002 total R&D expenditures in the biological sciences: fiscal years 1999--2002

(Dollars in thousands)

Institution and ranking	Total				Federally financed			
	1999	2000	2001	2002	1999	2000	2001	2002
Total, all institutions	5,038,373	5,617,977	5,944,043	6,577,585	3,221,331	3,653,857	3,871,355	4,406,305
1 Baylor C. of Medicine	134,205	161,269	206,458	217,202	85,138	115,970	153,250	165,271
2 Washington U. St. Louis	121,658	152,562	172,778	161,833	93,845	117,727	130,763	130,449
3 U. PA	116,607	133,269	139,556	155,680	89,125	102,380	112,144	125,800
4 Rockefeller U.	110,870	112,967	131,770	150,571	37,924	37,997	46,674	57,543
5 U. WI Madison	109,170	119,722	127,460	135,056	54,115	61,131	65,058	71,057
6 Johns Hopkins U., The	89,017	98,701	111,540	120,338	69,030	78,137	89,607	98,084
7 U. CA Davis	62,830	84,997	119,269	118,477	25,046	35,990	40,033	45,283
8 U. TX Southwestern Medical Ctr. Dallas	73,654	87,243	92,071	118,025	48,467	54,978	57,120	68,565
9 U. WA	98,301	111,425	102,824	112,566	75,050	77,047	78,281	93,957
10 U. NC Chapel Hill	80,602	87,196	96,387	109,958	60,698	66,577	73,616	81,988
Total, 1st 10 institutions	996,914	1,149,351	1,300,113	1,399,706	638,438	747,934	846,546	937,997
11 Yale U.	78,469	86,408	90,292	101,912	65,121	72,024	74,531	83,427
12 Columbia U. in the City of New York	75,186	78,329	84,359	101,784	64,933	71,417	77,148	92,131
13 U. MI all campuses	77,403	83,497	90,204	101,593	57,611	60,459	65,246	72,384
14 U. TX M. D. Anderson Cancer Ctr.	67,760	76,021	84,749	98,147	32,330	37,732	40,098	47,848
15 U. GA	64,073	68,244	73,668	84,603	27,675	29,784	31,617	38,075
16 Vanderbilt U.	57,323	69,404	68,259	82,878	47,819	56,644	57,147	73,480
17 Harvard U.	108,751	90,740	92,150	81,845	95,605	77,164	77,780	70,557
18 MI State U.	55,665	64,601	71,116	78,263	28,137	28,080	32,128	37,175
19 Tufts U.	71,567	73,036	73,730	74,421	48,542	49,247	54,948	56,575
20 U. CA Irvine	48,952	57,143	66,508	72,281	33,036	39,950	47,114	49,434
Total, 1st 20 institutions	1,702,063	1,896,774	2,095,148	2,277,433	1,139,247	1,270,435	1,404,303	1,559,083
21 U. AL Birmingham, The	62,859	66,291	65,554	71,488	49,015	51,231	55,766	61,924
22 LA State U. all campuses	50,931	56,366	62,038	70,378	29,572	32,581	33,067	35,869
23 Cornell U. all campuses	49,823	52,559	64,047	70,347	28,645	29,243	34,128	41,772
24 U. AZ	50,545	57,167	66,847	69,688	27,421	32,101	39,746	41,453
25 U. of Medicine and Dentistry NJ	50,211	55,491	59,076	69,481	32,100	37,135	40,327	45,117
26 NC State U.	58,039	63,084	69,462	68,619	12,774	16,409	23,184	19,689
27 U. TX Medical Branch Galveston	43,909	41,471	49,447	67,922	27,303	27,499	30,234	41,297
28 Duke U.	62,002	66,887	73,228	66,854	51,986	54,605	60,533	51,181
29 Mt. Sinai School of Medicine	49,611	58,576	66,120	64,867	38,074	43,900	38,307	44,061
30 U. CA San Francisco	0	59,650	22,878	64,000	0	45,399	16,074	42,676
Total, 1st 30 institutions	2,179,993	2,474,316	2,693,845	2,961,077	1,436,137	1,640,538	1,775,669	1,984,122
31 U. MN all campuses	53,502	54,228	54,865	62,555	35,396	33,317	33,857	35,943
32 OH State U. all campuses	46,073	52,365	58,416	61,101	24,205	28,026	31,400	32,995
33 Northwestern U.	51,343	57,705	62,340	60,132	37,665	41,056	43,707	44,069
34 U. CA Berkeley	84,488	105,170	59,752	59,935	48,568	59,746	44,244	44,598
35 U. Cincinnati all campuses	42,373	45,463	50,764	58,584	30,223	34,337	39,300	45,530

See explanatory information and SOURCE at end of table.

TABLE B-61. Total and federally financed R&D expenditures in the biological sciences at universities and colleges, ranked by fiscal year 2002 total R&D expenditures in the biological sciences: fiscal years 1999--2002

(Dollars in thousands)

Institution and ranking	Total				Federally financed			
	1999	2000	2001	2002	1999	2000	2001	2002
36 U. Chicago	35,140	38,325	49,696	57,812	30,216	30,813	41,020	46,532
37 U. CO all campuses	40,601	48,258	55,001	57,550	34,279	41,457	46,408	50,116
38 U. KS all campuses	41,879	47,159	49,805	57,182	19,769	22,870	27,021	29,601
39 U. VA all campuses	31,679	36,926	41,679	56,922	25,914	30,570	34,493	47,503
40 Purdue U. all campuses	44,636	46,279	52,406	56,102	17,221	18,839	24,159	27,640
Total, 1st 40 institutions	2,651,707	3,006,194	3,228,569	3,548,952	1,739,593	1,981,569	2,141,278	2,388,649
41 Emory U.	40,742	44,884	51,160	55,999	33,978	37,809	42,981	46,403
42 MA Institute of Technology	52,411	57,181	58,635	55,993	40,848	44,122	46,892	45,324
43 IN U. all campuses	38,367	40,531	44,528	55,554	24,406	25,511	28,240	36,421
44 U. IL Urbana-Champaign	35,384	41,353	48,419	55,283	22,213	24,162	25,722	29,774
45 Thomas Jefferson U.	39,632	42,590	45,390	54,459	29,724	34,650	36,280	46,331
46 U. IA	37,860	44,149	50,154	53,114	23,798	27,879	31,580	34,900
47 U. FL	51,030	34,476	47,641	53,109	29,159	18,674	28,341	32,642
48 Case Western Reserve U.	45,270	50,163	49,514	51,428	34,726	39,255	39,596	43,858
49 U. TX Health Science Ctr. San Antonio	31,316	34,974	40,249	51,262	23,446	25,949	28,678	36,377
50 SUNY Stony Brook all campuses	44,046	49,072	54,662	51,118	28,424	30,859	30,050	34,044
Total, 1st 50 institutions	3,067,765	3,445,567	3,718,921	4,086,271	2,030,315	2,290,439	2,479,638	2,774,723
51 U. CA San Diego	35,619	40,608	37,957	50,860	26,043	30,260	26,145	32,803
52 SUNY Buffalo all campuses	47,346	52,362	36,465	50,530	29,596	33,921	23,661	33,120
53 NY U.	43,356	44,200	46,407	49,904	33,815	34,497	35,504	38,575
54 U. KY all campuses	2,141	3,184	2,767	48,463	1,203	1,319	1,581	30,439
55 OR Health Sciences U.	31,026 i	51,801	41,636	48,304e	28,203 i	45,755	38,459	44,880e
56 U. IL Chicago	32,830	39,590	49,407	47,644	19,257	23,236	30,786	30,954
57 U. Rochester	30,292	37,694	41,874	46,447	24,938	31,985	34,525	38,736
58 U. CT all campuses	28,864	35,293	39,168	45,972	15,804	19,300	23,167	31,630
59 U. MA Worcester	30,079	32,296	35,724	44,810	26,301	28,016	32,419	40,556
60 Rutgers The State U. NJ all campuses	39,776	42,223	41,922	42,791	11,494	13,960	14,047	15,630
Total, 1st 60 institutions	3,389,094	3,824,818	4,092,248	4,561,996	2,246,969	2,552,688	2,739,932	3,112,046
61 U. TX Houston Health Science Ctr.	24,590	33,997	38,043	41,473	17,247	25,855	28,243	30,794
62 U. TN system	22,621	27,690	31,864	40,798	15,550	19,293	24,553	31,797
63 WA State U.	36,994	38,726	38,620	40,132	18,217	19,328	17,767	19,897
64 U. MD Baltimore	21,135	33,652	35,851	40,023	12,677	13,682	14,864	17,552
65 U. NE Medical Ctr.	34,363	31,245	34,607	39,917	12,732	14,558	15,539	17,966
66 Medical C. WI	22,674	28,980	34,617	39,154	17,375	22,597	26,420	30,870
67 U. UT	26,549	34,153	36,329	38,450	23,490	27,856	26,220	27,592
68 Medical U. SC	17,804e	19,688	30,502	38,101	11,056	13,017	19,961	28,954
69 Yeshiva U.	27,093	33,843	35,931	38,087	21,738	24,635	26,131	27,699
70 CA Institute of Technology	26,791	31,931	33,779	37,600	26,077	28,580	31,553	35,134
Total, 1st 70 institutions	3,649,708	4,138,723	4,442,391	4,955,731	2,423,128	2,762,089	2,971,183	3,380,301
71 U. NM all campuses	19,727	25,465	31,014	36,040	15,098	21,075	23,076	28,512
72 IA State U.	32,699	32,227	33,480	35,378	10,270	10,819	11,301	13,680
73 SUNY Albany	38,486	55,159	41,335	35,182	34,434	50,670	35,658	30,396
74 U. NE Lincoln	20,762	21,964	30,927	34,091	5,550	5,649	9,723	12,603
75 U. MO-Columbia	29,330	30,760	33,827	33,340	11,459	13,250	15,316	18,723

See explanatory information and SOURCE at end of table.

TABLE B-61. Total and federally financed R&D expenditures in the biological sciences at universities and colleges, ranked by fiscal year 2002 total R&D expenditures in the biological sciences: fiscal years 1999--2002

(Dollars in thousands)

Institution and ranking	Total				Federally financed			
	1999	2000	2001	2002	1999	2000	2001	2002
76 VA Commonwealth U.	24,843	26,825	28,591	32,772	18,163	18,574	20,107	22,644
77 TX A&M U. all campuses	87,757	33,216	32,798	32,584	18,399	10,146	8,426	9,554
78 OR State U.	25,311	26,003	28,355	31,947	10,745	11,155	11,940	15,184
79 U. OK all campuses	26,202	26,916	28,644	30,906	14,314	13,005	15,794	17,608
80 Medical C. GA	21,783	27,765	30,271	29,913	8,825	10,294	13,137	13,461
Total, 1st 80 institutions	3,976,608	4,445,023	4,761,633	5,287,884	2,570,385	2,926,726	3,135,661	3,562,666
81 PA State U. all campuses	53,873	56,446	27,305	29,379	32,794	35,919	14,688	17,173
82 Princeton U.	19,429	23,185	26,431	29,180	13,148	15,571	17,546	21,380
83 U. VT	20,324	21,253	23,789	28,718	15,413	16,863	17,865	22,132
84 U. Miami	18,474	20,681	21,616	24,726	15,210	16,444	16,816	18,534
85 U. TX Austin	21,507	26,891	29,195	22,675	14,733	18,409	20,227	15,482
86 U. CA Los Angeles	47,043	51,743	18,799	22,351	31,370	33,860	10,801	13,981
87 KS State U.	15,511	15,881	16,575	21,876	7,099	7,346	7,925	12,635
88 Brandeis U.	20,127	20,159	22,902	21,187	14,534	14,241	17,263	15,482
89 CO State U.	30,081	31,277	18,474	21,084	17,158	18,694	7,262	10,719
90 SUNY Health Science Ctr. Brooklyn	17,322	18,509	18,509e	20,681 i	14,272	15,089	15,089e	16,829 i
Total, 1st 90 institutions	4,240,299	4,731,048	4,985,228	5,529,741	2,746,116	3,119,162	3,281,143	3,727,013
91 OK State U. all campuses	14,784	17,554	18,430	19,601	5,028	6,459	5,739	5,896
92 U. MD Biotechnology Institute	17,633	16,940	18,007	19,107	5,623	6,311	6,107	5,882
93 Loyola U. (Chicago, IL)	12,443	11,203	14,616	18,584	8,485	7,944	11,371	15,558
94 Meharry Medical C.	4,600	4,600e	7,288 i	18,406	4,593	4,593e	7,288 i	18,356
95 Temple U.	21,905	15,256	16,645	18,025	13,509	12,044	12,492	13,270
96 Stanford U.	13,799	15,361	14,984	17,853	11,594	12,315	11,388	13,389
97 NY Medical C.	11,656	11,800	13,990	17,380	9,086	9,505	11,666	13,933
98 VA Polytechnic Institute & State U.	8,539	11,741	12,751	16,454	2,957	3,847	4,263	7,026
99 U. NV, Reno	10,416	11,815	15,016	16,219	7,934	9,016	11,329	13,420
100 Tulane U.	8,930	10,196	11,885	16,194	6,583	7,370	6,812	10,167
Total, 1st 100 institutions	4,365,004	4,857,514	5,128,840	5,707,564	2,821,508	3,198,566	3,369,598	3,843,910
Total, all other sampled institutions	673,369	760,463	815,203	870,021	399,823	455,291	501,757	562,395

e = estimated.
i = imputed.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-62. Total and federally financed R&D expenditures in the medical sciences at universities and colleges, ranked by fiscal year 2002 total R&D expenditures in the medical sciences: fiscal years 1999--2002

(Dollars in thousands)

Institution and ranking	Total				Federally financed			
	1999	2000	2001	2002	1999	2000	2001	2002
Total, all institutions	8,003,039	8,986,419	10,189,478	11,504,705	4,865,993	5,441,833	6,260,185	7,230,513
1 U. CA Los Angeles	280,259	312,078	462,136	537,772	138,132	152,515	208,134	247,311
2 U. CA San Francisco	417,095	369,884	486,729	505,703	233,181	193,883	249,791	263,802
3 Johns Hopkins U., The	242,613	258,324	298,656	347,468	190,804	202,668	235,267	282,113
4 U. Pittsburgh all campuses	202,368	237,966	279,251	321,572	159,532	186,326	219,767	251,920
5 Duke U.	227,513	230,670	239,127	299,704	90,674	104,471	110,770	155,482
6 Stanford U.	202,810	242,679	260,328	286,805	162,450	186,983	203,098	221,964
7 U. WA	208,752	239,350	279,027	284,686	158,060	177,807	206,149	218,691
8 U. PA	176,630	199,489	230,791	253,871	131,420	148,823	176,736	196,534
9 U. CA San Diego	179,946	213,430	235,301	241,406	109,662	124,941	137,598	145,766
10 U. MN all campuses	148,885	173,794	200,593	231,995	97,117	111,373	130,966	159,548
Total, 1st 10 institutions	2,286,871	2,477,664	2,971,939	3,310,982	1,471,032	1,589,790	1,878,276	2,143,131
11 U. WI Madison	166,138	179,773	198,242	228,724	70,011	74,842	78,722	96,547
12 Harvard U.	112,668	153,796	186,454	224,969	87,613	129,901	154,340	190,970
13 U. MD Baltimore	112,723	179,477	191,206	213,458	67,613	72,969	79,273	93,614
14 U. MI all campuses	159,844	183,043	186,148	205,213	101,076	112,859	117,552	132,419
15 Washington U. St. Louis	150,302	164,561	185,732	205,172	94,916	106,261	121,071	138,263
16 Yale U.	156,104	169,786	187,848	200,308	117,149	130,375	139,922	153,602
17 Baylor C. of Medicine	137,993	172,906	175,003	194,722	55,973	77,279	81,144	94,204
18 U. Southern CA	133,378	148,314	169,220	184,196	84,793	91,893	109,489	121,590
19 Columbia U. in the City of New York	109,152	132,827	154,959	177,161	88,544	113,332	134,102	148,940
20 Cornell U. all campuses	124,879	138,082	156,146	175,155	74,618	82,343	93,161	103,438
Total, 1st 20 institutions	3,650,052	4,100,229	4,762,897	5,320,060	2,313,338	2,581,844	2,987,052	3,416,718
21 U. AL Birmingham, The	150,941	149,166	149,791	164,272	103,675	111,146	126,192	138,804
22 Wayne State U.	108,818	116,063	134,074	152,591	44,983	50,451	60,743	73,575
23 U. CO all campuses	105,120	111,438	122,409	151,887	80,370	93,510	100,540	126,065
24 Emory U.	109,007	115,760	129,895	150,660	68,489	74,023	87,296	95,171
25 U. IA	116,988	135,912	131,647	150,216	72,901	84,526	79,779	95,369
26 U. TX M. D. Anderson Cancer Ctr.	80,063	97,326	116,247	148,715	33,686	40,231	48,725	62,451
27 U. TX Southwestern Medical Ctr. Dallas	91,496	101,518	129,698	145,189	53,209	53,847	74,149	86,083
28 U. NC Chapel Hill	90,829	99,553	116,484	140,192	71,610	76,970	90,714	99,906
29 U. South FL	80,608	91,892	112,226	128,491	21,188	28,399	33,877	49,329
30 U. IL Chicago	86,864	94,381	111,543	128,276	42,909	48,167	59,277	70,015
Total, 1st 30 institutions	4,670,786	5,213,238	6,016,911	6,780,549	2,906,358	3,243,114	3,748,344	4,313,486
31 U. Rochester	75,767	81,799	108,323	121,966	48,650	53,561	65,913	82,217
32 Mt. Sinai School of Medicine	78,154	91,270	110,826	120,468	46,550	54,288	71,037	81,918
33 Case Western Reserve U.	97,140	103,269	103,459	119,958	79,194	86,372	93,650	110,871
34 Boston U.	86,658	95,805	108,662	119,867	73,418	81,463	92,068	104,378
35 Northwestern U.	88,008	87,605	96,134	117,787	40,965	50,440	55,630	67,934

See explanatory information and SOURCE at end of table.

TABLE B-62. Total and federally financed R&D expenditures in the medical sciences at universities and colleges, ranked by fiscal year 2002 total R&D expenditures in the medical sciences: fiscal years 1999--2002

(Dollars in thousands)

Institution and ranking	Total				Federally financed			
	1999	2000	2001	2002	1999	2000	2001	2002
36 U. Chicago	72,861	82,954	97,357	117,468	61,186	66,148	74,222	93,985
37 IN U. all campuses	75,755	87,059	99,307	116,922	43,415	46,910	51,688	56,887
38 U. Cincinnati all campuses	71,409	84,952	98,809	112,288	52,887	60,122	72,679	86,758
39 SUNY Buffalo all campuses	51,472	63,675	83,824	111,091	23,637	28,453	39,463	51,992
40 U. of Medicine and Dentistry NJ	76,066	85,460	103,341	108,675	29,630	38,183	45,727	45,118
Total, 1st 40 institutions	5,444,076	6,077,086	7,026,953	7,947,039	3,405,890	3,809,054	4,410,421	5,095,544
41 Wake Forest U.	80,678	85,083	95,714	108,418	58,868	64,663	76,655	89,581
42 U. CA Davis	81,734	79,361	92,150	106,874	45,165	39,118	43,769	52,203
43 U. AZ	60,917	74,590	85,213	97,842	36,930	42,825	48,748	58,334
44 OH State U. all campuses	66,430	80,300	81,376	96,930	34,223	37,533	43,684	54,837
45 U. FL	68,348	95,009	84,627	94,775	32,326	38,784	34,013	43,470
46 U. Miami	79,299	82,709	86,099	92,920	48,646	51,783	53,767	54,257
47 OR Health Sciences U.	80,613 i	65,485	78,024	90,513e	59,138 i	50,027	57,842	67,445e
48 NY U.	54,225	64,090	74,482	88,315	31,967	34,990	40,319	48,019
49 U. TX Houston Health Science Ctr.	69,756	68,805	80,144	87,051	46,343	44,657	58,522	65,234
50 Yeshiva U.	60,965	76,148	80,845	85,696	48,914	55,430	58,794	62,322
Total, 1st 50 institutions	6,147,041	6,848,666	7,865,627	8,896,373	3,848,410	4,268,864	4,926,534	5,691,246
51 Dartmouth C.	51,140	56,534	70,666	83,062	33,898	39,111	44,644	57,803
52 Georgetown U.	85,697e	107,609	81,472	78,926	66,170	82,703	77,266	71,520
53 U. TX Health Science Ctr. San Antonio	56,488	68,850	74,905	78,354	33,458	39,302	42,475	47,384
54 Vanderbilt U.	52,456	59,285	73,053	74,042	36,745	39,046	52,764	60,056
55 U. UT	66,691	52,488	58,897	69,203	42,186	41,447	43,445	52,553
56 Medical U. SC	28,395e	31,648	58,654	68,454	15,457	19,236	28,456	34,285
57 U. VA all campuses	48,544	52,593	56,158	65,520	39,540	43,464	46,338	55,053
58 U. KY all campuses	67,909	82,698	91,612	63,885	37,086	40,070	49,211	27,765
59 U. CA Irvine	45,305	49,477	51,110	63,125	15,406	20,830	20,759	28,812
60 U. CT all campuses	42,471	50,379	50,147	61,609	20,281	24,380	20,916	27,925
Total, 1st 60 institutions	6,692,137	7,460,227	8,532,301	9,602,553	4,188,637	4,658,453	5,352,808	6,154,402
61 Rush U.	44,802	52,830	53,634	60,344	21,752	25,223	28,121	32,570
62 PA State U. all campuses	21,693	23,825	48,279	59,892	15,691	16,194	36,705	48,076
63 U. TX Medical Branch Galveston	48,263	54,655	51,430	59,266	27,456	33,022	33,652	35,796
64 VA Commonwealth U.	42,880	46,724	54,798	58,493	23,477	25,707	27,521	31,164
65 Medical C. WI	38,772	41,601	49,240	57,546	29,712	32,437	37,583	45,371
66 U. MA Worcester	31,531	40,328	44,349	51,616	26,260	31,972	35,318	41,948
67 TX A&M U. all campuses	19,097	46,591	51,233	50,428	11,186	13,244	15,289	14,901
68 U. Louisville	25,256	28,675	30,579	49,716	6,084	7,396	11,684	23,962
69 TX A&M U. System Health Science Ctr.	--	24,048	40,392	49,014	--	13,411	18,034	22,104
70 Charles R. Drew U. of Medicine & Science	24,484	31,045	36,717	48,839	22,212	21,969	27,415	39,259
Total, 1st 70 institutions	6,988,915	7,850,549	8,992,952	10,147,707	4,372,467	4,879,028	5,624,130	6,489,553
71 Thomas Jefferson U.	38,053	45,792	42,211	46,854	25,985	31,671	27,497	31,491
72 SUNY Stony Brook all campuses	34,518	39,652	40,313	44,139	20,160	20,445	20,258	23,156
73 LA State U. all campuses	26,301	35,966	42,844	41,448	8,549	10,672	11,592	14,194
74 U. KS all campuses	23,220	26,894	42,092	41,149	10,765	14,025	21,351	22,193
75 U. CA Berkeley	62,167	86,010	37,720	40,377	13,367	14,234	19,809	20,664

See explanatory information and SOURCE at end of table.

TABLE B-62. Total and federally financed R&D expenditures in the medical sciences at universities and colleges, ranked by fiscal year 2002 total R&D expenditures in the medical sciences: fiscal years 1999--2002

(Dollars in thousands)

Institution and ranking	Total				Federally financed			
	1999	2000	2001	2002	1999	2000	2001	2002
76 U. TN system	36,393	37,253	33,114	39,112	15,093	17,236	16,400	20,799
77 Brown U.	26,100	28,495	29,146	38,880 i	16,459	19,609	20,246	25,600 i
78 U. VT	25,662	25,677	31,810	38,070	11,468	14,701	21,253	25,532
79 U. OK all campuses	31,709	35,404	35,612	38,007	14,234	11,774	11,505	14,260
80 U. MO-Columbia	26,870	31,259	33,376	37,324	11,886	13,997	14,967	17,415
Total, 1st 80 institutions	7,319,908	8,242,951	9,361,190	10,553,067	4,520,433	5,047,392	5,809,008	6,704,857
81 U. AR for Medical Sciences	31,577	37,613	33,975	34,649	17,606	20,003	20,529	19,907
82 Tulane U.	28,675	27,513	30,315	31,918	11,043	10,352	10,909	11,838
83 U. NE Medical Ctr.	19,842	20,212	25,913	30,817	4,435	5,320	6,958	10,636
84 U. PR Medical Sciences Campus	17,114	21,373	23,913	29,089	13,971	16,657	19,433	23,931
85 U. MS all campuses	16,082 i	18,542	23,481 i	27,255 i	7,417 i	8,396	13,043 i	17,157 i
86 George Washington U.	22,905	22,814	35,326	26,602	14,985	13,607	22,340	14,423
87 U. LA Lafayette	10,321	13,327	14,174	25,627	1,323	5,294	6,155	7,061
88 U. GA	20,872	24,527	25,078	25,611	2,187	2,906	3,176	3,707
89 WV U.	17,038	18,527	25,171	25,483	4,825	7,701	9,220	11,348
90 U. SC all campuses	18,609	18,022	19,033	25,263	9,472	10,584	9,692	10,826
Total, 1st 90 institutions	7,522,943	8,465,421	9,617,569	10,835,381	4,607,697	5,148,212	5,930,463	6,835,691
91 U. NM all campuses	11,274	14,349	19,147	24,841	9,293	11,906	14,203	18,423
92 Rutgers The State U. NJ all campuses	20,506	17,518	20,121	23,926	8,322	7,128	7,676	11,767
93 Medical C. GA	19,217	17,754	21,841	21,718	5,166	4,916	7,963	9,804
94 U. HI Manoa	17,716	20,433	21,053	21,625	13,016	15,094	16,406	17,277
95 Eastern VA Medical School	15,687	13,820	16,654	21,296	8,392	8,396	7,570	8,139
96 MI State U.	13,505	18,467	20,705	21,232	7,985	9,782	10,839	11,333
97 Temple U.	17,425	14,383	17,843	19,840	7,770	11,040	11,345	12,725
98 Uniformed Services U. of the Health Sciences	13,350	15,656	15,694	18,111	5,653	7,194	6,821	6,511
99 MCP Hahnemann U.	15,329	20,573	17,001	17,905	6,641	9,688	10,139	9,671
100 MA Institute of Technology	13,541	14,553	17,128	17,729	7,697	9,592	11,080	11,896
Total, 1st 100 institutions	7,680,493	8,632,927	9,804,756	11,043,604	4,687,632	5,242,948	6,034,505	6,953,237
Total, all other sampled institutions	322,546	353,492	384,722	461,101	178,361	198,885	225,680	277,276

-- = not available.
e = estimated.
i = imputed.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-63. Total and federally financed R&D expenditures in psychology at universities and colleges, ranked by fiscal year 2002 total R&D expenditures in psychology: fiscal years 1999--2002

(Dollars in thousands)

Institution and ranking	Total				Federally financed			
	1999	2000	2001	2002	1999	2000	2001	2002
Total, all institutions	464,260	516,337	582,613	670,622	309,274	350,232	398,312	474,374
1 U. WI Madison	20,009	23,237	22,838	24,743	15,437	17,657	16,715	18,587
2 NY U.	4,944	9,909	11,233	14,629	3,907	7,874	9,219	12,247
3 U. OK all campuses	11,778	13,927	11,937	13,043	3,231	4,632	4,426	4,398
4 PA State U. all campuses	10,774	11,227	12,530	12,634	6,621	6,049	6,864	7,581
5 U. MI all campuses	8,285	9,076	11,049	12,259	4,367	4,337	5,701	8,317
6 U. Rochester	6,276	7,975	10,161	11,737	4,036	4,761	6,508	7,591
7 U. South FL	6,636	7,542	10,092	11,416	2,908	2,875	3,817	4,689
8 U. CA Los Angeles	8,623	9,012	10,688	11,188	5,680	6,501	7,251	7,211
9 U. Memphis, The	7,355	9,375	9,788	11,084	3,229	5,143	4,537	5,661
10 IN U. all campuses	8,552	9,073	9,652	10,500	6,281	6,090	6,380	6,762
Total, 1st 10 institutions	93,232	110,353	119,968	133,233	55,697	65,919	71,418	83,044
11 Temple U.	4,262	4,360	11,604	10,482	2,229	2,962	7,230	7,143
12 U. GA	6,979	7,632	8,421	10,302	2,516	2,771	3,585	5,093
13 U. CA Berkeley	7,080	7,218	8,244	9,823	4,696	4,459	4,239	6,310
14 U. MN all campuses	7,095	8,218	8,201	9,768	5,068	5,175	5,269	6,717
15 Rutgers The State U. NJ all campuses	8,155	7,758	8,420	9,527	3,440	3,262	3,029	4,003
16 U. IL Urbana-Champaign	7,385	8,872	9,320	9,485	4,765	5,512	5,754	5,483
17 U. NM all campuses	4,492	5,872	7,168	9,373	3,119	4,232	5,050	7,790
18 GA State U.	7,604	7,182	6,586	9,009	2,694	3,204	3,456	5,992
19 U. OR	2,103	2,525	4,373	8,848	1,819	2,333	4,048	8,505
20 U. WA	9,228	9,493	9,316	8,718	8,432	8,716	7,998	7,485
Total, 1st 20 institutions	157,615	179,483	201,621	228,568	94,475	108,545	121,076	147,565
21 U. Houston	3,024	2,954	3,445	8,457	1,951	1,715	1,733	6,205
22 U. Miami	5,914	6,893	7,749	8,412	5,829	6,725	7,625	8,213
23 U. CO all campuses	7,453	7,840	9,635	8,246	4,350	6,339	8,097	7,206
24 San Diego State U.	4,436	6,160	6,714	7,975	2,391	4,137	3,715	3,826
25 OH State U. all campuses	3,664	4,480	5,719	7,876	2,890	3,422	4,068	5,353
26 U. CT all campuses	5,488	7,876	6,608	7,375	2,406	4,219	3,910	5,783
27 U. CA Santa Barbara	1,777	2,222	5,912	7,077	1,426	1,830	4,221	4,797
28 Cornell U. all campuses	6,372	6,077	6,425	7,055	2,327	2,083	1,942	2,302
29 Carnegie-Mellon U.	6,300	5,880	6,460	7,016	4,026	4,095	4,336	6,295
30 U. NE Lincoln	1,536	1,901	5,802	6,724	182	186	3,666	3,840
Total, 1st 30 institutions	203,579	231,766	266,090	304,781	122,253	143,296	164,389	201,385
31 FL State U.	4,589	4,234	5,922	6,579	3,030	2,877	3,907	3,065
32 San Jose State U.	2,938e	2,938e	5,714	6,530	2,698e	2,698e	5,694	6,527
33 U. FL	4,478	5,122	5,845	6,371	3,127	3,591	3,831	4,945
34 OR Health Sciences U.	4,007 i	5,041	5,495	6,350e	3,820 i	4,980	5,343	6,252e
35 AZ State U. main campus	5,616	5,438	6,399	6,308	4,115	3,678	4,251	4,996
36 U. IL Chicago	4,388	4,155	5,832	6,273	2,607	2,567	3,475	4,014
37 U. CA San Diego	5,012	5,364	5,831	6,182	3,491	4,370	4,931	5,258
38 Harvard U.	4,548	4,387	3,964	6,168	3,953	4,059	3,648	5,901
39 Boston U.	2,465	3,349	4,879	6,004	2,364	3,295	4,773	5,823
40 Yale U.	3,625	4,162	4,720	5,987	2,450	2,698	3,978	3,735
Total, 1st 40 institutions	245,245	275,956	320,691	367,533	153,908	178,109	208,220	251,901

See explanatory information and SOURCE at end of table.

TABLE B-63. Total and federally financed R&D expenditures in psychology at universities and colleges, ranked by fiscal year 2002 total R&D expenditures in psychology: fiscal years 1999--2002

(Dollars in thousands)

Institution and ranking	Total				Federally financed			
	1999	2000	2001	2002	1999	2000	2001	2002
41 MI State U.	2,526	3,698	5,401	5,983	1,645	2,514	3,853	3,940
42 Vanderbilt U.	2,262	2,674	3,601	5,940	1,774	2,264	2,643	4,655
43 U. AL Birmingham, The	5,117	6,233	5,495	5,895	4,423	5,763	5,091	5,374
44 Dartmouth C.	1,216	3,100	4,685	5,868	428	2,431	3,473	4,173
45 U. Pittsburgh all campuses	4,455	4,546	4,791	5,669	4,172	3,865	4,540	5,451
46 U. NC Chapel Hill	3,070	3,710	4,282	5,584	2,747	3,370	3,871	4,669
47 Princeton U.	5,246	5,259	3,892	5,404	4,080	3,743	2,195	3,944
48 U. RI	4,365	3,434	4,408	5,391	3,951	3,250	3,809	4,843
49 U. TX Austin	2,798	3,423	4,336	5,350	2,227	2,980	3,735	4,748
50 U. MA Amherst	4,071	4,788	5,360	5,144	2,932	3,449	3,884	3,555
Total, 1st 50 institutions	280,371	316,821	366,942	423,761	182,287	211,738	245,314	297,253
51 U. VA all campuses	2,984	2,775	3,001	5,070	2,679	2,550	2,759	4,467
52 Stanford U.	4,103	4,616	4,906	4,837	3,420	3,830	3,880	3,672
53 U. Southern CA	3,987	3,965	5,013	4,650	3,705	3,394	3,895	3,625
54 U. CA Irvine	2,057	3,313	3,768	4,649	1,561	2,358	3,115	3,661
55 GA Institute of Technology all campuses	3,457	4,358	4,128	4,524	1,480	1,806	1,937	2,202
56 Purdue U. all campuses	2,727	2,965	4,010	4,524	1,653	1,634	2,262	2,598
57 U. IA	2,788	3,180	4,201	4,521	2,060	2,252	3,423	3,897
58 U. MO-Columbia	4,235	4,515	5,274	4,506	2,964	2,863	3,000	2,700
59 CUNY Hunter C.	1,644	2,143	2,899	4,141	864	1,578	2,113	3,205
60 Tufts U.	2,753	2,933	3,357	4,133	1,488	1,312	1,935	1,725
Total, 1st 60 institutions	311,106	351,584	407,499	469,316	204,161	235,315	273,633	329,005
61 CO State U.	3,252	2,679	3,004	3,979	2,764	2,530	2,839	2,885
62 U. MD College Park	1,913	3,233	3,873	3,970	1,536	2,394	2,677	3,019
63 SUNY Buffalo all campuses	5,391	4,990	3,360	3,964	3,954	3,514	1,463	2,006
64 SUNY Stony Brook all campuses	3,024	4,057	3,464	3,851	2,196	2,394	2,653	2,788
65 U. Chicago	2,393	2,306	2,620	3,844	1,289	1,383	2,588	3,813
66 Duke U.	4,276	3,645	3,862	3,783	3,836	3,089	3,184	2,943
67 U. PA	3,470	2,903	3,483	3,504	3,380	2,564	3,050	2,982
68 U. KY all campuses	870	799	872	3,400	592	645	749	2,887
69 Johns Hopkins U., The	3,383	3,636	3,940	3,371	3,237	3,453	3,691	3,250
70 U. AZ	2,612	38	3,403	3,342	1,133	0	1,705	2,131
Total, 1st 70 institutions	341,690	379,870	439,380	506,324	228,078	257,281	298,232	357,709
71 Northwestern U.	1,911	2,952	2,894	3,314	1,595	1,836	2,305	2,800
72 Teachers C. Columbia U.	2,250	2,992	3,085	3,301	1,504	2,471	2,480	2,636
73 SUNY Binghamton	3,368	2,991	2,482	3,233	1,480	1,773	1,648	2,136
74 VA Commonwealth U.	1,928	2,081	3,096	3,214	1,129	1,417	2,166	2,259
75 U. SC all campuses	3,925	4,013	3,596	3,102	2,933	2,890	2,416	2,064
76 Columbia U. in the City of New York	2,735	3,066	3,469	3,098	2,488	2,865	3,268	2,951
77 TX A&M U. all campuses	2,859	2,752	2,898	3,078	1,721	1,583	1,761	2,420
78 Washington U. St. Louis	1,692	1,663	2,225	3,039	1,439	1,469	1,864	2,215
79 Brown U.	2,236	2,143	2,666	3,028	1,396	1,400	1,868	2,216
80 Wayne State U.	2,775	3,096	2,749	2,960	1,793	1,915	1,805	1,821
Total, 1st 80 institutions	367,369	407,619	468,540	537,691	245,556	276,900	319,813	381,227

See explanatory information and SOURCE at end of table.

TABLE B-63. Total and federally financed R&D expenditures in psychology at universities and colleges, ranked by fiscal year 2002 total R&D expenditures in psychology: fiscal years 1999--2002

(Dollars in thousands)

Institution and ranking	Total				Federally financed			
	1999	2000	2001	2002	1999	2000	2001	2002
81 Howard U.	987	360	1,693	2,553	980	360	1,693	2,553
82 CA State U. Long Beach	73 i	6,187	105	2,528	73 i	3,550	94	1,490
83 U. Denver	1,743	1,916	2,904	2,483	1,660	1,907	2,172	2,339
84 VA Polytechnic Institute & State U.	2,613	2,142	2,015	2,461	1,777	1,057	1,210	1,502
85 U. Louisville	2,220	1,819	2,130	2,405	1,260	982	1,153	1,867
86 U. UT	1,627	1,836	2,271	2,347	1,298	1,637	1,618	1,809
87 UT State U.	876	1,067	1,782	2,298	193	451	1,131	1,223
88 U. AL, The	460	1,346	1,917	2,226	354	1,258	1,877	2,203
89 U. of Notre Dame	974	1,355	1,729	2,177	696	1,084	1,337	1,809
90 TX Christian U.	2,794	2,043	2,397	2,147	2,790	2,037	2,382	2,142
Total, 1st 90 institutions	381,736	427,690	487,483	561,316	256,637	291,223	334,480	400,164
91 George Mason U.	2,165	1,903	1,871	2,143	1,877	1,766	1,728	1,967
92 U.S. Air Force Academy	187	126	50	2,024	183	111	45	39
93 Depaul U.	717	570	1,189	2,011	481	302	861	1,775
94 Syracuse U. all campuses	1,873	1,523	1,254	1,978	1,420	1,465	1,250	1,952
95 Northeastern U.	1,368	1,281	1,579	1,969	1,026	935	1,162	1,290
96 U. Central FL	687	1,026	1,247	1,902	536	844	1,146	1,756
97 SUNY Albany	3,054	2,489	2,213	1,885	2,228	1,767	1,438	867
98 Brandeis U.	1,372	1,712	1,621	1,882	1,301	1,641	1,474	1,506
99 Rush U.	2,791	1,067	1,284	1,813	1,085	395	896	1,369
100 U. MA Lowell	813	724	1,142	1,777	352	376	903	1,508
Total, 1st 100 institutions	396,763	440,111	500,933	580,700	267,126	300,825	345,383	414,193
Total, all other sampled institutions	67,497	76,226	81,680	89,922	42,148	49,407	52,929	60,181

e = estimated.
i = imputed.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-64. R&D expenditures in the social sciences at universities and colleges, ranked by fiscal year 2002 R&D expenditures in the social sciences: fiscal years 1999--2002 and by subfield for fiscal year 2002

(Dollars in thousands)

Institution and ranking	1999	2000	2001	2002	2002, by subfield			
					Economics	Political science	Sociology	Other
Total, all institutions	1,251,709	1,298,305	1,440,335	1,582,888	284,056	270,779	379,302	648,751
1 U. MI all campuses	56,723	56,840	75,406	92,279	13,726	6,304	12,521	59,728
2 U. MD College Park	58,148	54,827	61,208	62,573	4,667	11,604	6,592	39,710
3 U. CA Berkeley	38,531	41,708	44,406	51,204	13,466	6,622	7,899	23,217
4 U. NC Chapel Hill	22,556	22,325	25,281	43,742	142	0	27,298	16,302
5 U. CA Los Angeles	28,802	32,915	35,135	42,971	823	645	11,454	30,049
6 U. WI Madison	28,154	31,083	35,284	36,982	9,814	3,083	12,744	11,341
7 U. GA	31,228	31,287	34,768	34,689	12,652	3,389	2,056	16,592
8 U. PA	25,405	30,842	31,948	34,590	2,474	13,657	7,565	10,894
9 IN U. all campuses	21,829	29,271	34,401	33,908	2,794	12,370	8,462	10,282
10 OH State U. all campuses	21,809	20,035	30,546	30,963	5,494	3,466	2,946	19,057
Total, 1st 10 institutions	333,185	351,133	408,383	463,901	66,052	61,140	99,537	237,172
11 Harvard U.	33,073	31,473	31,132	26,738	5,387	17,767	787	2,797
12 Princeton U.	14,709	16,544	19,003	26,351	3,018	21,607	828	898
13 PA State U. all campuses	45,289	16,529	19,577	25,408	1,494	2,612	21,237	65
14 U. IL Urbana-Champaign	21,908	24,868	23,922	24,875	9,423	1,379	6,357	7,716
15 MI State U.	18,731	19,130	21,461	23,383	8,463	3,698	1,982	9,240
16 Rutgers The State U. NJ all campuses	20,219	22,708	27,826	23,288	1,052	9,442	2,161	10,633
17 FL State U.	9,213	13,065	18,967	22,103	495	4,592	11,139	5,877
18 Purdue U. all campuses	17,707	18,050	18,864	20,095	6,708	245	2,471	10,671
19 Cornell U. all campuses	12,750	12,963	14,737	19,497	5,738	18	1,846	11,895
20 Duke U.	11,580	14,656	14,794	18,769	2,662	5,395	7,797	2,915
Total, 1st 20 institutions	538,364	541,119	618,666	694,408	110,492	127,895	156,142	299,879
21 U. AZ	14,184	15,044	16,149	17,987	4,408	303	9,289	3,987
22 Brandeis U.	21,682	19,575	21,376	16,733	160	4	13,895	2,674
23 U. CA Davis	3,106	3,649	13,247	16,578	8,354	2,673	553	4,998
24 U. MN all campuses	14,008	14,567	14,792	14,973	8,524	2,352	1,572	2,525
25 U. Pittsburgh all campuses	6,166	7,750	10,570	13,915	304	935	1,243	11,433
26 U. FL	10,217	9,525	11,971	13,726	8,271	206	1,295	3,954
27 U. OK all campuses	8,970	9,896	10,020	13,335	1,250	2,252	1,313	8,520
28 U. IL Chicago	8,321	9,439	10,977	13,319	261	61	4,524	8,473
29 U. WA	15,415	8,029	10,019	13,231	183	7,032	2,775	3,241
30 IA State U.	15,369	15,842	14,125	12,834	3,408	317	8,826	283
Total, 1st 30 institutions	655,802	654,435	751,912	841,039	145,615	144,030	201,427	349,967
31 Northwestern U.	6,569	8,260	9,523	12,473	755	8,159	856	2,703
32 U. CA Santa Barbara	8,037	8,974	10,531	12,285	13	71	269	11,932
33 U. MO-Columbia	11,424	12,393	14,072	12,254	7,086	369	1,418	3,381
34 U. CO all campuses	5,921	7,176	9,274	12,032	523	171	5,984	5,354
35 U. NE Lincoln	10,380	10,505	9,662	11,792	4,036	1,136	2,131	4,489
36 OK State U. all campuses	8,861	7,796	8,630	11,652	4,718	984	1,222	4,728
37 U. TX Austin	9,295	9,617	13,898	11,470	182	129	4,025	7,134
38 SUNY Albany	7,542	7,389	8,532	10,832	215	3,189	4,840	2,588
39 U. CA San Diego	10,084	9,668	10,705	10,532	762	3,794	5,100	876
40 WA State U.	9,259	9,450	10,535	10,326	5,894	349	3,820	263
Total, 1st 40 institutions	743,174	745,663	857,274	956,687	169,799	162,381	231,092	393,415

See explanatory information and SOURCE at end of table.

TABLE B-64. R&D expenditures in the social sciences at universities and colleges, ranked by fiscal year 2002 R&D expenditures in the social sciences: fiscal years 1999--2002 and by subfield for fiscal year 2002

(Dollars in thousands)

Institution and ranking	1999	2000	2001	2002	2002, by subfield			
					Economics	Political science	Sociology	Other
41 GA State U.	15,192	14,748	10,186	10,319	7,662	422	1,844	391
42 Stanford U.	6,603	6,363	8,888	10,287	1,380	65	612	8,230
43 AZ State U. main campus	9,248	9,591	10,114	10,083	2,037	1,536	534	5,976
44 U. CA Riverside	2,567	3,337	5,850	9,886	67	23	441	9,355
45 U. SC all campuses	9,442	9,540	12,537	9,757	1,190	4,031	756	3,780
46 Carnegie-Mellon U.	9,101	9,193	8,827	9,569	2,213	3,852	1,141	2,363
47 U. CA Irvine	5,766	5,494	8,539	9,472	71	4,865	953	3,583
48 LA State U. all campuses	9,325	8,331	7,443	9,461	2,486	355	2,448	4,172
49 U. Southern CA	6,437	7,640	7,666	9,249	204	4,466	2,392	2,187
50 U. CT all campuses	6,409	8,552	8,382	9,219	1,511	958	1,677	5,073
Total, 1st 50 institutions	823,264	828,452	945,706	1,053,989	188,620	182,954	243,890	438,525
51 VA Polytechnic Institute & State U.	5,271	7,419	10,098	9,157	1,462	2,695	1,366	3,634
52 FL International U.	5,770	3,864	8,351	8,926	0	0	0	8,926
53 NC State U.	5,504	6,918	8,968	8,604	4,397	289	2,690	1,228
54 George Mason U.	6,907	7,219	7,977	8,354	2,500	4,732	263	859
55 Johns Hopkins U., The	7,760	10,588	9,698	8,193	431	12	5,079	2,671
56 Tufts U.	4,096	5,606	6,291	8,049	167	6,768	2	1,112
57 U. MA Boston	6,776	6,664	7,085	8,030	4	507	505	7,014
58 NY U.	5,979	5,566	7,022	8,029	1,242	5,672	934	181
59 Portland State U.	7,069	9,095	8,600	7,784	148	394	465	6,777
60 George Washington U.	6,461	8,827	6,523	7,587	358	3,358	2,909	962
Total, 1st 60 institutions	884,857	900,218	1,026,319	1,136,702	199,329	207,381	258,103	471,889
61 ND State U. all campuses	3,558	4,769	5,549	7,538	1,953	0	401	5,184
62 TX A&M U. all campuses	16,784	7,227	7,543	7,510	2,641	647	1,591	2,631
63 U. NM all campuses	6,671	6,574	6,180	7,177	510	1,159	511	4,997
64 Columbia U. in the City of New York	4,899	5,413	5,709	7,158	134	235	6,789	0
65 U. Akron all campuses	2,962	3,721	5,389	7,098	27	232	6,582	257
66 U. TN system	4,920	5,221	5,834	7,048	5,232	2	931	883
67 Clemson U.	3,906	4,518	8,718	7,001	2,421	1,065	1,046	2,469
68 U. WI Milwaukee	5,885	5,042	5,468	6,960	432	87	671	5,770
69 U. KS all campuses	3,426	5,711	5,726	6,901	516	1,611	3,899	875
70 U. IA	7,854	7,970	7,235	6,778	244	2,345	1,249	2,940
Total, 1st 70 institutions	945,722	956,384	1,089,670	1,207,871	213,439	214,764	281,773	497,895
71 Vanderbilt U.	4,118	5,291	6,322	6,704	181	6,448	37	38
72 Wayne State U.	5,276	5,358	5,375	6,684	1,987	610	4,057	30
73 U. Memphis, The	5,034	4,748	5,551	6,370	4,109	542	1,562	157
74 Brown U.	4,724	4,613	4,912	6,223	1,803 i	579 i	767 i	3,074 i
75 Naval Postgraduate School	4,647 i	5,108 i	5,561 i	6,196 i	1,918 i	1,164 i	2,782 i	332 i
76 U. Central FL	3,813	5,204	5,902	6,006	445	94	1,046	4,421
77 Washington U. St. Louis	2,877	4,217	4,784	5,863	0	397	5,076	390
78 MA Institute of Technology	8,908	8,293	6,152	5,793	2,206	2,091	578	918
79 TX Tech U.	5,704	5,799	2,891	5,738	1,642	1,401	1,875	820
80 San Diego State U.	2,728	5,893	5,142	5,655	720	974	952	3,009
Total, 1st 80 institutions	993,551	1,010,908	1,142,262	1,269,103	228,450	229,064	300,505	511,084

See explanatory information and SOURCE at end of table.

TABLE B-64. R&D expenditures in the social sciences at universities and colleges, ranked by fiscal year 2002 R&D expenditures in the social sciences: fiscal years 1999--2002 and by subfield for fiscal year 2002

(Dollars in thousands)

Institution and ranking	1999	2000	2001	2002	2002, by subfield			
					Economics	Political science	Sociology	Other
81 U. DE	4,961	4,918	4,831	5,423	174	12	4,431	806
82 Teachers C. Columbia U.	4,235	4,492	5,004	5,305	1,356	0	0	3,949
83 Cleveland State U.	5,939 i	4,775	5,923	5,212	25	0	170	5,017
84 East TN State U.	0	651	1,433	5,142	133	0	4,296	713
85 New School U.	4,363	4,447	5,026	5,026e	309e	935e	937e	2,845e
86 Emory U.	1,073	3,292	4,373	4,914	2,376	701	1,837	0
87 Western MI U.	3,279	2,874	2,184	4,887	75	70	451	4,291
88 Boston C.	2,637	4,204	4,266	4,873	2,403	368	456	1,646
89 U. KY all campuses	3,222	3,174	3,556	4,867	1,008	1,023	974	1,862
90 U. MT, The	1,980	2,586	4,242	4,685	1,581	19	122	2,963
Total, 1st 90 institutions	1,025,240	1,046,321	1,183,100	1,319,437	237,890	232,192	314,179	535,176
91 MS State U.	3,829	4,349	4,950	4,653	361	489	382	3,421
92 CO State U.	2,827	2,722	3,068	4,651	546	1	206	3,898
93 U. NH	4,629	4,781	5,733	4,541	203	527	2,719	1,092
94 Yale U.	2,213	1,965	1,894	4,389	1,039	13	176	3,161
95 Tulane U.	1,777	2,097	3,998	4,251	0	8	62	4,181
96 Syracuse U. all campuses	2,796	4,383	5,509	4,212	27	2,769	127	1,289
97 SUNY Buffalo all campuses	5,317	6,301	5,041	4,098	451	1	200	3,446
98 Southern IL U. Edwardsville	594	760	418	4,076	503	33	435	3,105
99 KS State U.	3,115	3,288	3,530	3,952	2,494	0	188	1,270
100 U. MS all campuses	637	1,216	2,118	3,937	3,477	267	193	0
Total, 1st 100 institutions	1,052,974	1,078,183	1,219,359	1,362,197	246,991	236,300	318,867	560,039
Total, all other sampled institutions	198,735	220,122	220,976	220,691	37,065	34,479	60,435	88,712

e = estimated.
i = imputed.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-65. Federally financed R&D expenditures in the social sciences at universities and colleges, ranked by fiscal year 2002
federally financed R&D expenditures in the social sciences: fiscal years 1999--2002 and by subfield for fiscal year 2002

(Dollars in thousands)

Institution and ranking	1999	2000	2001	2002	2002, by subfield			
					Economics	Political science	Sociology	Other
Total, all institutions	471,881	489,970	545,973	616,163	101,378	75,761	180,752	258,272
1 U. MI all campuses	37,293	42,739	53,209	62,450	10,826	4,775	7,396	39,453
2 U. MD College Park	35,385	30,484	33,164	32,218	3,948	3,148	2,933	22,189
3 U. NC Chapel Hill	15,750	14,633	18,069	29,399	47	0	19,720	9,632
4 U. WI Madison	12,995	14,113	15,094	17,179	5,164	84	6,488	5,443
5 Duke U.	7,563	10,924	11,045	13,611	992	3,366	6,884	2,369
6 U. PA	5,942	8,585	8,997	11,846	1,304	2,737	3,755	4,050
7 Harvard U.	13,426	14,119	13,050	11,613	2,854	6,737	2	2,020
8 OH State U. all campuses	12,504	7,992	14,489	11,543	1,464	1,509	1,036	7,534
9 MI State U.	9,516	9,070	9,979	10,042	5,549	805	901	2,787
10 U. CO all campuses	4,178	5,432	7,140	9,832	465	144	4,631	4,592
Total, 1st 10 institutions	154,552	158,091	184,236	209,733	32,613	23,305	53,746	100,069
11 PA State U. all campuses	12,362	5,221	6,220	9,289	795	493	7,967	34
12 FL State U.	2,711	5,143	6,645	8,294	212	790	4,833	2,459
13 U. AZ	5,841	5,979	7,509	8,218	1,709	160	5,433	916
14 IA State U.	8,754	9,414	7,415	7,060	774	0	6,068	218
15 Johns Hopkins U., The	5,355	8,019	6,613	6,905	367	0	4,373	2,165
16 IN U. all campuses	4,919	4,821	5,838	6,643	221	1,416	4,365	641
17 Brandeis U.	9,587	5,585	5,942	6,273	58	0	5,575	640
18 Cornell U. all campuses	4,107	3,858	3,894	6,185	1,455	0	413	4,317
19 U. TX Austin	2,273	4,416	6,710	6,103	129	22	3,059	2,893
20 Naval Postgraduate School	4,564 i	5,000 i	5,497 i	6,080 i	1,882 i	1,142 i	2,730 i	326 i
Total, 1st 20 institutions	215,025	215,547	246,519	280,783	40,215	27,328	98,562	114,678
21 FL International U.	629	2,264	4,515	6,004	0	0	0	6,004
22 U. Pittsburgh all campuses	4,340	4,800	5,402	5,960	201	390	669	4,700
23 U. CA Santa Barbara	4,121	4,984	5,518	5,752	0	0	4	5,748
24 U. CA Los Angeles	3,119	2,796	4,451	5,679	227	23	1,795	3,634
25 Carnegie-Mellon U.	6,464	6,750	6,779	5,473	930	1,883	557	2,103
26 OK State U. all campuses	2,840	1,965	2,281	5,389	361	825	630	3,573
27 Columbia U. in the City of New York	3,747	3,216	4,312	5,283	134	0	5,149	0
28 Portland State U.	5,388	6,451	5,759	5,265	83	161	179	4,842
29 U. IL Chicago	1,368	2,503	2,694	5,105	98	0	2,929	2,078
30 NY U.	3,334	2,013	3,610	5,015	1,004	3,241	639	131
Total, 1st 30 institutions	250,375	253,289	291,840	335,708	43,253	33,851	111,113	147,491
31 U. CA Berkeley	5,430	5,613	5,706	4,999	1,814	115	959	2,111
32 Vanderbilt U.	3,165	3,879	4,468	4,900	65	4,803	32	0
33 ND State U. all campuses	2,286	3,105	3,361	4,878	1,172	0	342	3,364
34 George Mason U.	3,763	3,791	4,598	4,486	537	3,068	150	731
35 Washington U. St. Louis	2,232	2,904	3,498	4,484	0	130	4,133	221
36 U. IL Urbana-Champaign	3,688	3,858	4,127	4,344	1,410	135	600	2,199
37 Princeton U.	2,560	3,545	2,738	4,273	542	3,497	209	25
38 Northwestern U.	1,915	2,725	3,402	4,270	300	3,585	307	78
39 SUNY Albany	4,156	4,239	4,254	4,151	78	356	1,864	1,853
40 U. CA Davis	476	529	2,539	4,086	3,246	261	121	458
Total, 1st 40 institutions	280,046	287,477	330,531	380,579	52,417	49,801	119,830	158,531

See explanatory information and SOURCE at end of table.

TABLE B-65. Federally financed R&D expenditures in the social sciences at universities and colleges, ranked by fiscal year 2002
federally financed R&D expenditures in the social sciences: fiscal years 1999--2002 and by subfield for fiscal year 2002

(Dollars in thousands)

Institution and ranking	1999	2000	2001	2002	2002, by subfield			
					Economics	Political science	Sociology	Other
41 U. MO-Columbia	3,693	4,703	4,324	4,002	2,880	28	775	319
42 U. MN all campuses	2,127	2,891	3,031	3,894	2,015	830	964	85
43 U. CT all campuses	1,193	947	2,092	3,885	613	367	772	2,133
44 U. DE	2,312	2,567	3,494	3,768	75	1	3,640	52
45 U. CA San Diego	4,630	4,327	3,762	3,710	475	615	2,554	66
46 U. MS all campuses	394	824	1,861	3,704	3,462	64	178	0
47 Tulane U.	1,306	1,656	3,345	3,689	0	0	37	3,652
48 U. WI Milwaukee	2,165	2,025	2,676	3,639	82	76	467	3,014
49 U. WA	8,236	1,222	1,593	3,609	37	708	1,587	1,277
50 U. Memphis, The	298	2,524	2,708	3,583	2,588	46	866	83
Total, 1st 50 institutions	306,400	311,163	359,417	418,062	64,644	52,536	131,670	169,212
51 U. OK all campuses	2,175	2,354	2,592	3,554	0	0	411	3,143
52 U. FL	1,978	1,197	1,806	3,460	1,662	1	634	1,163
53 U. SC all campuses	2,359	2,779	4,020	3,410	528	114	437	2,331
54 Purdue U. all campuses	2,730	2,993	3,439	3,403	1,654	38	1,032	679
55 WA State U.	2,981	2,461	2,425	3,362	2,185	97	1,080	0
56 U. Central FL	1,326	1,321	2,701	3,276	149	40	617	2,470
57 U. CA Irvine	2,158	1,746	2,780	3,170	26	1,803	227	1,114
58 Boston C.	959	2,041	2,729	3,128	2,017	31	75	1,005
59 Stanford U.	1,638	1,623	2,493	3,120	702	0	388	2,030
60 U. Southern CA	2,927	3,009	2,996	2,983	192	1,353	689	749
Total, 1st 60 institutions	327,631	332,687	387,398	450,928	73,759	56,013	137,260	183,896
61 U. KS all campuses	659	1,983	1,877	2,979	117	281	2,066	515
62 U. LA Monroe, The	2,353	2,353e	2,588 i	2,950 i	2,254 i	0 i	696 i	0 i
63 George Washington U.	1,498	2,403	2,383	2,931	179	1,313	1,035	404
64 U. MA Boston	1,265	1,027	974	2,898	0	142	97	2,659
65 Georgetown U.	2,372	2,440	2,642	2,871	44	492	2,335	0
66 CO State U.	1,140	1,558	1,736	2,798	446	0	136	2,216
67 U. NM all campuses	2,498	2,382	1,942	2,699	386	567	323	1,423
68 U. NH	1,614	1,933	2,615	2,696	125	231	1,935	405
69 U. NE Lincoln	3,311	3,324	1,556	2,666	253	221	1,136	1,056
70 Rutgers The State U. NJ all campuses	4,294	4,687	4,241	2,643	56	449	36	2,102
Total, 1st 70 institutions	348,635	356,777	409,952	479,059	77,619	59,709	147,055	194,676
71 U. MT, The	854	1,821	2,742	2,529	624	13	114	1,778
72 GA State U.	6,579	2,806	1,759	2,506	1,590	93	744	79
73 U. GA	1,873	2,658	2,664	2,429	749	17	0	1,663
74 U. Miami	3,389	3,051	2,499	2,426	0	0	621	1,805
75 VA Polytechnic Institute & State U.	1,956	1,402	1,175	2,426	296	166	664	1,300
76 Western MI U.	304	320	510	2,406	16	29	99	2,262
77 Syracuse U. all campuses	2,120	1,749	3,418	2,396	12	1,105	8	1,271
78 U. CA Riverside	480	345	1,502	2,375	16	0	175	2,184
79 MS State U.	1,818	1,357	2,431	2,248	0	7	26	2,215
80 U. Chicago	3,443	2,117	2,913	2,235	255	1,631	17	332
Total, 1st 80 institutions	371,451	374,403	431,565	503,035	81,177	62,770	149,523	209,565

See explanatory information and SOURCE at end of table.

TABLE B-65. Federally financed R&D expenditures in the social sciences at universities and colleges, ranked by fiscal year 2002 federally financed R&D expenditures in the social sciences: fiscal years 1999--2002 and by subfield for fiscal year 2002

(Dollars in thousands)

Institution and ranking	1999	2000	2001	2002	2002, by subfield			
					Economics	Political science	Sociology	Other
81 American U.	933	204	783	2,159	58	1,184	18	899
82 Clark U.	18	15	1,237	2,112	2	0	0	2,110
83 U. KY all campuses	1,323	1,258	1,134	2,073	572	232	432	837
84 AZ State U. main campus	1,472	1,847	1,814	2,035	109	50	216	1,660
85 Clemson U.	1,064	1,231	2,926	2,022	477	300	360	885
86 LA State U. all campuses	1,523	1,753	1,314	1,941	364	76	1,168	333
87 U. HI Manoa	1,186	1,700	3,074	1,844	38	0	54	1,752
88 Wayne State U.	707	342	1,305	1,837	592	0	1,245	0
89 GA Institute of Technology all campuses	1,295	1,905	2,587	1,833	756	380	380	317
90 Brown U.	1,064	1,100	1,000	1,765	47 i	0 i	5 i	1,713 i
Total, 1st 90 institutions	382,036	385,758	448,739	522,656	84,192	64,992	153,401	220,071
91 U. OR	1,089	1,312	1,256	1,744	249	10	159	1,326
92 NC State U.	747	1,275	2,352	1,715	595	127	794	199
93 U. IA	2,146	1,991	1,706	1,708	219	751	407	331
94 Case Western Reserve U.	1,511	2,031	2,268	1,697	54	0	1,643	0
95 U. DC	0	0	737	1,649	0	0	1,649	0
96 U. AL, The	1,415	1,117	1,136	1,607	0	477	0	1,130
97 Teachers C. Columbia U.	1,992	2,224	1,683	1,597	622	0	0	975
98 UT State U.	501	811	1,804	1,542	478	0	71	993
99 U. Louisville	265	312	482	1,539	0	97	159	1,283
100 TX A&M U. all campuses	3,880	1,685	1,320	1,529	85	208	851	385
Total, 1st 100 institutions	395,582	398,516	463,483	538,983	86,494	66,662	159,134	226,693
Total, all other sampled institutions	76,299	91,454	82,490	77,180	14,884	9,099	21,618	31,579

e = estimated.
i = imputed.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-66. Current fund expenditures for research equipment at universities and colleges, by science and engineering field and source of funds: fiscal years 1995, 2001, and 2002

(Dollars in thousands)

Field	Total			Federal			Non-Federal		
	1995	2001	2002	1995	2001	2002	1995	2001	2002
Total	1,238,804	1,514,862	1,690,993	735,108	843,085	1,002,112	503,696	671,777	688,881
Engineering	272,024	333,718	363,054	164,344	178,921	212,836	107,680	154,797	150,218
Aeronautical and astronautical	16,495	23,821	24,485	12,771	17,082	19,420	3,724	6,739	5,065
Bioengineering/biomedical	--	14,990	18,014	--	7,104	9,547	--	7,886	8,467
Chemical	21,974	30,937	30,095	12,921	15,989	16,612	9,053	14,948	13,483
Civil	22,415	32,177	42,357	9,915	12,596	25,076	12,500	19,581	17,281
Electrical	68,179	79,198	79,523	42,105	46,496	47,979	26,074	32,702	31,544
Mechanical	41,770	48,527	53,814	26,595	28,797	34,216	15,175	19,730	19,598
Metallurgical and materials	27,928	49,316	40,657	14,110	22,305	21,574	13,818	27,011	19,083
Other, nec	73,263	54,752	74,109	45,927	28,552	38,412	27,336	26,200	35,697
All sciences	966,780	1,181,144	1,327,939	570,764	664,164	789,276	396,016	516,980	538,663
Physical sciences	239,591	240,204	270,733	178,798	160,824	190,744	60,793	79,380	79,989
Astronomy	22,389	14,571	18,990	13,789	12,173	15,373	8,600	2,398	3,617
Chemistry	81,160	100,250	120,009	56,883	57,903	74,814	24,277	42,347	45,195
Physics	114,396	112,632	119,565	93,488	81,015	91,608	20,908	31,617	27,957
Other, nec	21,646	12,751	12,169	14,638	9,733	8,949	7,008	3,018	3,220
Environmental sciences	83,150	88,937	132,772	58,104	55,176	82,107	25,046	33,761	50,665
Atmospheric	13,749	13,250	15,880	9,837	10,105	12,300	3,912	3,145	3,580
Earth sciences	26,930	29,560	31,991	16,947	16,419	18,486	9,983	13,141	13,505
Oceanography	27,607	34,806	74,306	21,128	22,215	45,887	6,479	12,591	28,419
Other, nec	14,864	11,321	10,595	10,192	6,437	5,434	4,672	4,884	5,161
Mathematical sciences	14,401	11,793	10,144	9,444	6,226	6,850	4,957	5,567	3,294
Computer sciences	76,537	65,110	101,299	48,589	41,908	74,787	27,948	23,202	26,512
Life sciences	463,730	688,905	728,793	225,245	362,827	405,331	238,485	326,078	323,462
Agricultural sciences	63,243	81,933	70,121	20,189	23,077	21,081	43,054	58,856	49,040
Biological sciences	191,260	282,950	292,555	107,055	166,270	174,656	84,205	116,680	117,899
Medical sciences	186,722	303,583	336,945	90,212	163,376	196,377	96,510	140,207	140,568
Other, nec	22,505	20,439	29,172	7,789	10,104	13,217	14,716	10,335	15,955
Psychology	12,256	14,413	18,719	7,781	9,076	13,266	4,475	5,337	5,453
Social sciences	26,518	16,900	17,356	10,480	6,460	6,631	16,038	10,440	10,725
Economics	7,237	2,354	2,451	2,817	976	943	4,420	1,378	1,508
Political science	3,174	1,997	2,157	1,169	773	544	2,005	1,224	1,613
Sociology	4,176	3,057	3,872	1,951	1,177	1,764	2,225	1,880	2,108
Other, nec	11,931	9,492	8,876	4,543	3,534	3,380	7,388	5,958	5,496
Other sciences, nec	50,597	54,882	48,123	32,323	21,667	9,560	18,274	33,215	38,563

-- = not available.
nec = not elsewhere classified.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-67. Current fund expenditures for research equipment at doctorate-granting institutions, by science and engineering field and source of funds: fiscal years 1995, 2001, and 2002

(Dollars in thousands)

Field	Total			Federal			Non-Federal		
	1995	2001	2002	1995	2001	2002	1995	2001	2002
Total	1,204,376	1,475,725	1,637,366	715,068	819,235	967,031	489,308	656,490	670,335
Engineering	266,054	327,530	354,581	161,152	176,118	206,529	104,902	151,412	148,052
Aeronautical and astronautical	16,022	22,697	20,830	12,313	15,975	15,791	3,709	6,722	5,039
Bioengineering/biomedical	--	14,813	17,944	--	7,099	9,534	--	7,714	8,410
Chemical	21,872	30,542	29,742	12,868	15,878	16,381	9,004	14,664	13,361
Civil	21,730	31,684	41,883	9,554	12,552	24,699	12,176	19,132	17,184
Electrical	66,764	78,197	78,541	41,026	46,257	47,422	25,738	31,940	31,119
Mechanical	41,155	46,913	52,419	26,255	27,963	33,254	14,900	18,950	19,165
Metallurgical and materials	27,846	49,202	40,639	14,075	22,229	21,558	13,771	26,973	19,081
Other, nec	70,665	53,482	72,583	45,061	28,165	37,890	25,604	25,317	34,693
All sciences	938,322	1,148,195	1,282,785	553,916	643,117	760,502	384,406	505,078	522,283
Physical sciences	229,228	230,195	254,356	172,259	154,501	179,613	56,969	75,694	74,743
Astronomy	22,107	14,302	18,441	13,597	12,072	15,143	8,510	2,230	3,298
Chemistry	75,049	93,837	109,802	53,004	53,934	67,990	22,045	39,903	41,812
Physics	110,731	109,406	114,802	91,099	78,791	88,143	19,632	30,615	26,659
Other, nec	21,341	12,650	11,311	14,559	9,704	8,337	6,782	2,946	2,974
Environmental sciences	79,901	84,877	127,827	56,591	52,742	79,135	23,310	32,135	48,692
Atmospheric	13,607	12,691	15,800	9,807	9,549	12,232	3,800	3,142	3,568
Earth sciences	25,473	27,380	29,314	16,531	15,191	16,871	8,942	12,189	12,443
Oceanography	26,623	33,882	72,553	20,284	21,644	44,671	6,339	12,238	27,882
Other, nec	14,198	10,924	10,160	9,969	6,358	5,361	4,229	4,566	4,799
Mathematical sciences	13,313	11,331	9,151	8,764	6,032	6,295	4,549	5,299	2,856
Computer sciences	75,170	62,299	99,434	47,772	39,843	73,558	27,398	22,456	25,876
Life sciences	455,795	675,853	711,863	219,989	354,031	393,760	235,806	321,822	318,103
Agricultural sciences .	61,251	77,837	65,526	18,566	19,683	17,869	42,685	58,154	47,657
Biological sciences	185,881	275,701	282,658	103,783	161,796	168,092	82,098	113,905	114,566
Medical sciences	186,306	302,254	335,637	89,918	162,735	195,278	96,388	139,519	140,359
Other, nec	22,357	20,061	28,042	7,722	9,817	12,521	14,635	10,244	15,521
Psychology	11,480	13,780	17,419	7,259	8,665	12,598	4,221	5,115	4,821
Social sciences	25,229	16,180	16,150	9,763	6,177	6,314	15,466	10,003	9,836
Economics	6,604	2,175	2,261	2,372	896	862	4,232	1,279	1,399
Political science	3,068	1,962	2,091	1,141	768	517	1,927	1,194	1,574
Sociology	3,900	2,910	3,621	1,787	1,142	1,721	2,113	1,768	1,900
Other, nec	11,657	9,133	8,177	4,463	3,371	3,214	7,194	5,762	4,963
Other sciences, nec	48,206	53,680	46,585	31,519	21,126	9,229	16,687	32,554	37,356

-- = not available.
nec = not elsewhere classified.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-68. Current fund expenditures for research equipment at universities and colleges, by science and engineering field, source of funds, and type of control: fiscal year 2002

(Dollars in thousands)

Field	Total			Federal			Non-Federal		
	Total	Public	Private	Total	Public	Private	Total	Public	Private
Total	1,690,993	1,185,195	505,798	1,002,112	644,533	357,579	688,881	540,662	148,219
Engineering	363,054	267,919	95,135	212,836	143,649	69,187	150,218	124,270	25,948
Aeronautical and astronautical	24,485	18,802	5,683	19,420	14,914	4,506	5,065	3,888	1,177
Bioengineering/biomedical	18,014	13,284	4,730	9,547	6,254	3,293	8,467	7,030	1,437
Chemical	30,095	22,464	7,631	16,612	11,825	4,787	13,483	10,639	2,844
Civil	42,357	37,906	4,451	25,076	21,285	3,791	17,281	16,621	660
Electrical	79,523	57,617	21,906	47,979	32,342	15,637	31,544	25,275	6,269
Mechanical	53,814	34,859	18,955	34,216	19,020	15,196	19,598	15,839	3,759
Metallurgical and materials	40,657	30,300	10,357	21,574	15,710	5,864	19,083	14,590	4,493
Other, nec	74,109	52,687	21,422	38,412	22,299	16,113	35,697	30,388	5,309
All sciences	1,327,939	917,276	410,663	789,276	500,884	288,392	538,663	416,392	122,271
Physical sciences	270,733	189,805	80,928	190,744	124,626	66,118	79,989	65,179	14,810
Astronomy	18,990	12,123	6,867	15,373	9,622	5,751	3,617	2,501	1,116
Chemistry	120,009	90,604	29,405	74,814	52,527	22,287	45,195	38,077	7,118
Physics	119,565	81,618	37,947	91,608	58,858	32,750	27,957	22,760	5,197
Other, nec	12,169	5,460	6,709	8,949	3,619	5,330	3,220	1,841	1,379
Environmental sciences	132,772	112,813	19,959	82,107	65,207	16,900	50,665	47,606	3,059
Atmospheric	15,880	12,972	2,908	12,300	9,453	2,847	3,580	3,519	61
Earth sciences	31,991	26,532	5,459	18,486	14,807	3,679	13,505	11,725	1,780
Oceanography	74,306	66,035	8,271	45,887	38,094	7,793	28,419	27,941	478
Other, nec	10,595	7,274	3,321	5,434	2,853	2,581	5,161	4,421	740
Mathematical sciences	10,144	6,474	3,670	6,850	3,914	2,936	3,294	2,560	734
Computer sciences	101,299	51,152	50,147	74,787	32,032	42,755	26,512	19,120	7,392
Life sciences	728,793	505,299	223,494	405,331	253,457	151,874	323,462	251,842	71,620
Agricultural sciences .	70,121	66,960	3,161	21,081	19,479	1,602	49,040	47,481	1,559
Biological sciences	292,555	188,397	104,158	174,656	101,885	72,771	117,899	86,512	31,387
Medical sciences	336,945	230,262	106,683	196,377	124,132	72,245	140,568	106,130	34,438
Other, nec	29,172	19,680	9,492	13,217	7,961	5,256	15,955	11,719	4,236
Psychology	18,719	13,346	5,373	13,266	9,281	3,985	5,453	4,065	1,388
Social sciences	17,356	14,939	2,417	6,631	5,719	912	10,725	9,220	1,505
Economics	2,451	2,069	382	943	748	195	1,508	1,321	187
Political science	2,157	1,724	433	544	414	130	1,613	1,310	303
Sociology	3,872	3,449	423	1,764	1,588	176	2,108	1,861	247
Other, nec	8,876	7,697	1,179	3,380	2,969	411	5,496	4,728	768
Other sciences, nec	48,123	23,448	24,675	9,560	6,648	2,912	38,563	16,800	21,763

nec = not elsewhere classified.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-69. Total and federally financed current fund expenditures for research equipment at universities and colleges, ranked by fiscal year 2002 total current fund expenditures for research equipment: fiscal years 1999--2002

(Dollars in thousands)

Institution and ranking	Total				Federally financed			
	1999	2000	2001	2002	1999	2000	2001	2002
Total, all institutions	1,326,683	1,436,096	1,514,862	1,690,993	772,708	810,045	843,085	1,002,112
1 Johns Hopkins U., The [1]	35,278	40,204	39,332	41,596	16,231	15,391	16,542	22,460
2 Carnegie-Mellon U.	8,215	8,748	12,875	37,262	5,892	4,485	9,792	33,547
3 MA Institute of Technology	26,250	37,195	35,776	35,503	20,601	30,256	25,295	23,999
4 U. WI Madison	23,859	33,102	30,338	35,389	12,938	18,010	16,381	19,493
5 U. CA Los Angeles	15,013	14,335	14,659	32,879	8,174	8,417	6,523	19,447
6 U. CA San Diego	15,648	13,870	13,323	31,775	7,710	8,624	7,955	22,752
7 U. WA	36,663	28,166	25,053	31,157	22,514	22,332	19,615	24,341
8 U. PR Medical Sciences Campus	7,272 i	14,544 i	21,816 i	29,089	5,983 i	11,966 i	17,949 i	23,931
9 C. of William and Mary all campuses	915	858	795	28,117	393	581	401	11,092
10 U. IL Urbana-Champaign	27,524	25,609	24,678	26,097	22,903	19,129	16,614	18,422
Total, 1st 10 institutions	196,637	216,631	218,645	328,864	123,339	139,191	137,067	219,484
11 Stanford U.	25,401	20,775	22,197	23,800	21,920	17,220	19,046	19,824
12 LA State U. all campuses	16,230	13,525	17,054	23,700	3,797	5,481	4,239	4,926
13 Purdue U. all campuses	16,527	14,239	13,887	23,252	9,789	7,406	6,495	5,586
14 IN U. all campuses	7,712	8,825	13,753	22,641	3,836	4,207	4,521	5,598
15 U. AZ	14,566	16,722	17,692	21,735	10,068	10,756	12,654	11,956
16 Cornell U. all campuses	27,301	24,166	18,297	21,443	14,554	12,589	12,733	15,049
17 U. CA Berkeley	9,854	12,730	10,424	21,205	6,295	7,670	6,065	12,805
18 GA Institute of Technology all campuses	24,331	26,819	25,493	21,201	10,414	11,111	11,962	10,320
19 U. CA San Francisco	9,131	12,088	12,434	20,916	4,489	6,604	6,068	8,856
20 U. MI all campuses	17,565	18,247	15,591	20,744	11,511	11,498	10,518	10,490
Total, 1st 20 institutions	365,255	384,767	385,467	549,501	220,012	233,733	231,368	324,894
21 PA State U. all campuses	16,476	18,799	19,500	20,403	8,334	9,128	9,713	12,724
22 U. CA Davis	14,571	14,346	18,784	19,317	7,471	6,123	8,137	7,263
23 U. FL	26,494	12,994	17,130	18,010	16,226	5,401	5,678	6,950
24 U. HI Manoa	10,920	7,160	9,005	17,387	6,673	4,869	6,594	13,248
25 U. Rochester	14,523	17,317	14,552	17,294	12,717	15,615	12,432	15,719
26 OH State U. all campuses	16,971	21,601	22,754	16,577	4,304	4,218	6,149	4,611
27 Washington U. St. Louis	17,863	19,804	18,224	16,108	14,955	16,983	14,372	13,172
28 U. Miami	8,801	8,064	8,637	15,864	6,565	5,927	5,944	11,709
29 Baylor C. of Medicine	13,248	20,939	25,079	15,690	6,780	13,657	9,846	7,975
30 Yale U.	9,774	10,655	12,980	14,660	8,610	8,577	10,947	12,214
Total, 1st 30 institutions	514,896	536,446	552,112	720,811	312,647	324,231	321,180	430,479
31 Columbia U. in the City of New York	14,172	10,060	12,929	14,575	12,463	8,549	11,006	9,941
32 U. CA Irvine	6,643	7,487	6,830	14,249	4,051	4,702	4,277	5,292
33 FL State U.	7,736	6,559	9,255	14,106	5,751	4,807	3,283	10,561
34 U. MN all campuses	14,014	16,727	14,823	14,038	8,498	9,232	8,933	9,391
35 SUNY Stony Brook all campuses	5,697	8,392	9,349	13,100	3,664	3,255	4,682	6,464
36 TX A&M U. all campuses	22,401	18,340	12,630	13,002	11,111	8,865	3,076	4,566
37 U. TX Austin	14,813	15,558	15,146	12,845	8,593	8,494	7,470	7,925
38 Duke U.	11,385	6,987	7,039	12,602	7,441	5,016	5,081	9,976
39 U. MD College Park	12,226	7,890	10,993	12,542	8,965	5,011	8,446	8,452
40 U. South FL	8,201	12,333	10,783	12,469	2,285	3,566	3,643	6,798
Total, 1st 40 institutions	632,184	646,779	661,889	854,339	385,469	385,728	381,077	509,845

See explanatory information and SOURCE at end of table.

TABLE B-69. Total and federally financed current fund expenditures for research equipment at universities and colleges, ranked by fiscal year 2002 total current fund expenditures for research equipment: fiscal years 1999--2002

(Dollars in thousands)

Institution and ranking	Total				Federally financed			
	1999	2000	2001	2002	1999	2000	2001	2002
41 Case Western Reserve U.	8,524	6,074	8,037	12,293	5,381	3,382	5,049	6,190
42 U. TX Southwestern Medical Ctr. Dallas	7,282	7,911	10,268	12,139	3,150	3,094	3,099	3,389
43 U. PA	11,617	12,065	9,747	11,856	8,597	9,708	7,959	9,367
44 U. CA Santa Barbara	6,862	7,649	5,679	11,788	5,604	5,670	4,309	6,813
45 Naval Postgraduate School	10,418 i	10,418 i	11,539 i	11,539 i	10,316 i	10,316 i	11,347 i	11,347 i
46 Harvard U.	11,533	11,712	9,957	11,304	9,418	9,552	8,595	10,823
47 Emory U.	5,124	7,817	8,497	10,790	2,875	4,327	4,148	3,902
48 Rutgers The State U. NJ all campuses	9,544	9,371	10,381	10,583	3,880	4,572	3,611	3,959
49 MI State U.	7,930	11,489	12,475	10,531	4,534	6,805	6,243	4,282
50 Northwestern U.	6,875	10,306	9,244	10,152	4,321	6,262	5,061	5,211
Total, 1st 50 institutions	717,893	741,591	757,713	967,314	443,545	449,416	440,498	575,128
51 U. GA	18,292	25,887	22,731	10,086	2,442	2,982	3,028	2,698
52 U. CO all campuses	6,853	9,852	10,531	10,035	5,886	9,077	9,641	9,063
53 U. OK all campuses	8,041	10,189	8,283	9,899	2,879	4,436	3,030	3,543
54 U. Chicago	12,704	11,695	11,589	9,884	11,628	10,344	9,269	8,115
55 Wayne State U.	6,851	5,714	10,500	9,546	1,756	1,961	1,853	2,712
56 U. VA all campuses	7,201	6,440	6,198	9,389	6,061	4,934	5,398	6,979
57 U. IL Chicago	8,421	8,482	11,894	9,374	3,096	3,770	5,356	2,354
58 U. KY all campuses	7,062	19,486	15,816	9,191	3,827	3,584	4,788	3,178
59 VA Polytechnic Institute & State U.	7,609	8,429	8,457	9,130	3,218	2,208	1,838	2,320
60 NM State U. all campuses	3,874	3,070	4,721	8,926	3,136	2,486	3,660	7,339
Total, 1st 60 institutions	804,801	850,835	868,433	1,062,774	487,474	495,198	488,359	623,429
61 U. IA	8,237	8,147	9,862	8,720	4,562	4,916	5,486	5,354
62 U. AL Birmingham, The	6,934	8,017	8,008	8,467	3,603	4,779	6,398	7,033
63 U. UT	9,240	10,281	10,004	8,430	6,319	6,909	5,038	4,963
64 U. Southern CA	8,148	8,856	11,232	8,272	5,590	6,273	9,269	6,081
65 U. MA Amherst	5,915	6,207	6,747	8,239	3,403	4,223	3,942	4,732
66 U. NE Lincoln	3,584	3,639	6,272	8,124	351	368	2,393	3,473
67 Vanderbilt U.	7,450	5,021	5,303	7,934	6,672	3,801	4,581	4,813
68 MS State U.	5,680	3,650	7,837	7,814	4,777	2,594	5,511	4,956
69 SUNY Buffalo all campuses	1,141	1,734	1,764	7,780	1,065	1,420	1,067	5,895
70 Yeshiva U.	7,836	5,998	7,331	7,771	2,891	2,702	5,865	6,217
Total, 1st 70 institutions	868,966	912,385	942,793	1,144,325	526,707	533,183	537,909	676,946
71 IA State U.	5,414	4,763	5,837	7,726	1,566	1,401	1,908	3,030
72 U. Pittsburgh all campuses	5,582	8,076	8,162	7,533	4,052	6,006	6,166	6,286
73 U. CT all campuses	5,063	6,858	6,673	7,522	1,734	2,081	3,748	4,027
74 U. DE	6,330	4,624	7,245	7,492	2,798	2,414	3,120	3,347
75 U. TX Houston Health Science Ctr.	3,333	3,481	4,638	7,470	1,821	2,459	3,325	5,023
76 U. TX M. D. Anderson Cancer Ctr.	5,710	8,419	11,449	7,435	622	1,718	1,348	942
77 U. NM all campuses	6,475	13,869	20,123	7,395	4,292	10,617	17,332	4,796
78 NY U.	5,898	6,740	8,671	7,302	3,256	3,637	5,595	4,924
79 Princeton U.	8,020	6,378	7,767	6,968	7,130	4,797	6,071	5,371
80 U. NC Chapel Hill	5,105	5,372	6,299	6,750	2,422	3,537	3,232	3,199
Total, 1st 80 institutions	925,896	980,965	1,029,657	1,217,918	556,400	571,850	589,754	717,891

See explanatory information and SOURCE at end of table.

TABLE B-69. Total and federally financed current fund expenditures for research equipment at universities and colleges, ranked by fiscal year 2002 total current fund expenditures for research equipment: fiscal years 1999--2002

(Dollars in thousands)

Institution and ranking	Total				Federally financed			
	1999	2000	2001	2002	1999	2000	2001	2002
81 Clemson U.	6,051	5,084	6,051	6,652	1,479	1,830	2,928	2,267
82 U. AR main campus	3,281	5,927	6,503	6,632	1,064	2,107	2,277	3,376
83 U. NV, Reno	1,605	3,186	3,928	6,586	946	2,353	2,711	5,887
84 CA Institute of Technology	27,234	27,093	8,923	6,559	20,788	16,057	8,141	6,198
85 Rockefeller U.	3,444	3,338	6,080	6,459	1,376	1,359	3,050	2,610
86 U. of Notre Dame	4,050	4,753	7,386	6,354	2,108	3,592	3,308	3,819
87 Boston U.	3,677	3,273	3,805	6,091	3,406	2,586	3,453	5,570
88 KS State U.	8,846	8,479	6,857	6,050	3,683	3,763	3,745	3,034
89 AZ State U. main campus	7,025	6,176	7,740	5,834	2,990	2,092	3,382	3,834
90 CO State U.	7,653	7,078	5,602	5,734	4,513	4,228	3,266	4,420
Total, 1st 90 institutions	998,762	1,055,352	1,092,532	1,280,869	598,753	611,817	626,015	758,906
91 U. Louisville	2,393	2,837	3,967	5,519	478	875	1,251	2,948
92 Brown U.	2,787	3,940	6,302	5,432	2,397	2,941	4,977	3,936
93 U. KS all campuses	5,297	5,976	4,687	5,429	2,053	3,809	2,914	3,903
94 OK State U. all campuses	5,894	6,884	5,823	5,426	1,475	1,388	1,744	1,237
95 U. Cincinnati all campuses	2,474	5,498	4,828	5,357	764	1,864	1,539	1,297
96 Medical U. SC	2,454	1,857	2,211	5,340	1,259	832	768	3,047
97 U. Central FL	3,430	3,318	18,247	5,303	2,100	901	2,152	2,895
98 U. MD Baltimore	3,732	2,841	4,778	5,281	1,537	970	1,608	1,729
99 U. MS all campuses	2,155 i	5,484	8,065 i	5,269 i	1,385 i	4,301	6,213 i	4,135 i
100 U. AK Fairbanks all campuses	6,786	4,938	10,939	5,258	1,845	1,343	2,318	3,093
Total, 1st 100 institutions	1,036,164	1,098,925	1,162,379	1,334,483	614,046	631,041	651,499	787,126
Total, all other sampled institutions	290,519	337,171	352,483	356,510	158,662	179,004	191,586	214,986

[1] Johns Hopkins University includes the Applied Physics Laboratory.

e = estimated.
i = imputed.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-70. R&D expenditures at university-administered federally funded research and development centers, by character of work: fiscal years 1953--2002

(Dollars in millions)

Fiscal year	Total	Character of work			
		Basic research		Applied research and development	
		Amount	Percent of total	Amount	Percent of total
1953	121	33	27.3	88	72.7
1954	141	39	27.7	102	72.3
1955	180	49	27.2	131	72.8
1956	194	51	26.3	143	73.7
1957	240	65	27.1	175	72.9
1958	293	78	26.6	215	73.4
1959	338	92	27.2	246	72.8
1960	360	97	26.9	263	73.1
1961	410	115	28.0	295	72.0
1962	470	136	28.9	334	71.1
1963	530	159	30.0	371	70.0
1964	629	191	30.4	438	69.6
1965	629	208	33.1	421	66.9
1966	630	227	36.0	403	64.0
1967	673	250	37.1	423	62.9
1968	719	276	38.4	443	61.6
1969	725	275	37.9	450	62.1
1970	737	269	36.5	468	63.5
1971	716	260	36.3	456	63.7
1972	753	244	32.4	509	67.6
1973	817	296	36.2	521	63.8
1974	865	390	45.1	475	54.9
1975	987	439	44.5	548	55.5
1976	1,147	512	44.6	635	55.4
1977	1,384	600	43.4	784	56.6
1978 [1]	1,717	--	--	--	--
1979	1,935	1,022	52.8	913	47.2
1980	2,246	1,132	50.4	1,114	49.6
1981	2,486	1,270	51.1	1,216	48.9
1982	2,479	1,327	53.5	1,152	46.5
1983	2,737	1,484	54.2	1,253	45.8
1984	3,150	1,690	53.6	1,461	46.4
1985	3,523	1,765	50.1	1,758	49.9
1986	3,895	1,876	48.2	2,018	51.8
1987	4,206	2,033	48.3	2,173	51.7
1988	4,531	2,245	49.6	2,285	50.4
1989	4,730	2,352	49.7	2,377	50.3
1990	4,832	2,428	50.2	2,404	49.8
1991	5,076	2,592	51.1	2,484	48.9
1992	5,245	2,840	54.2	2,404	45.8

See explanatory information and SOURCE at end of table.

TABLE B-70. R&D expenditures at university-administered federally funded research and development centers, by character of work: fiscal years 1953--2002

(Dollars in millions)

Fiscal year	Total	Character of work			
		Basic research		Applied research and development	
		Amount	Percent of total	Amount	Percent of total
1993	5,290	2,933	55.4	2,357	44.6
1994	5,271	2,998	56.9	2,273	43.1
1995	5,363	2,742	51.1	2,622	48.9
1996	5,380	2,580	48.0	2,800	52.0
1997	5,440	2,683	49.3	2,757	50.7
1998	5,531	2,636	47.7	2,895	52.3
1999	5,644	2,732	48.4	2,912	51.6
2000	5,675	2,863	50.5	2,812	49.5
2001	5,944	2,906	48.9	3,038	51.1
2002	7,069	3,698	52.3	3,371	47.7

[1] Separate data for basic research and applied research and development were not collected for fiscal year 1978.

-- = not available.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-71. Total and federally financed R&D expenditures at university-administered federally funded research and development centers, ranked by fiscal year 2002 total R&D expenditures: fiscal years 1999--2002

(Dollars in thousands)

Institution and ranking	Total				Federally financed			
	1999	2000	2001	2002	1999	2000	2001	2002
Total, all institutions	5,643,676	5,675,275	5,944,112	7,069,245	5,484,686	5,517,119	5,771,401	6,810,095
1 Los Alamos National Laboratory	1,278,901	1,333,194	1,333,194e	1,994,031	1,258,082	1,312,974	1,312,974e	1,884,284
2 Jet Propulsion Laboratory	1,232,170e	1,254,349e	1,355,463	1,435,039	1,232,170e	1,254,349e	1,355,463	1,435,039
3 Lawrence Livermore National Laboratory	1,075,536	1,041,234	1,090,875	1,227,111	1,028,629	993,962	1,049,675	1,192,111
4 Argonne National Laboratory	461,985	461,920	478,391	506,666	444,479	444,536	452,860	469,426
5 Lawrence Berkeley National Laboratory	345,441	367,113	408,487	467,461	291,271	311,225	337,757	407,166
6 MA Institute of Technology Lincoln Laboratory	353,321	348,339	380,200	451,200	345,762	341,809	370,616	443,883
7 Fermi National Accelerator Laboratory	296,105	297,082	310,928	313,556	296,105	297,082	310,928	313,556
8 Stanford Linear Accelerator Laboratory	144,711	149,438	145,979	171,343	144,711	149,438	145,979	171,343
9 National Ctr. for Atmospheric Research	132,587	115,510	119,846	157,173	123,327	106,819	116,553	153,202
10 Thomas Jefferson National Accelerator Facility	74,604	79,342	102,202	106,305	73,920	78,143	100,855	105,554
Total, 1st 10 institutions	5,395,361	5,447,521	5,725,565	6,829,885	5,238,456	5,290,337	5,553,660	6,575,564
11 Plasma Physics Laboratory	53,693	65,305	76,021	73,610	52,027	64,738	75,387	72,976
12 Software Engineering Institute	31,821	55,955	37,052	45,088	31,821	55,955	37,052	42,267
13 AUI National Radio Astronomy Observatory	37,162	35,536	34,208	43,900	36,771	35,313	34,043	43,684
14 National Optical Astronomy Observatory	37,308	36,409	37,364	41,051	37,308	36,409	37,364	41,051
15 Ames Laboratory	25,438	23,281	22,916	23,416	25,438	23,281	22,916	23,416
16 National Astronomy and Ionosphere Ctr.	10,950	11,268	10,986	12,295	10,922	11,086	10,979	11,137
17 Oak Ridge Associated U.	51,943	--	--	--	51,943	--	--	--
Total, 1st 17 institutions*	5,643,676	5,675,275	5,944,112	7,069,245	5,484,686	5,517,119	5,771,401	6,810,095

-- = not available.
e = estimated.

NOTE: Because of rounding, detail may not add to totals.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

TABLE B-72. R&D expenditures at all federally funded research and development centers, by source of funds and type of federally funded research and development center: fiscal year 2002

(Dollars in thousands)

Institution	Total	Federal Government	State and local governments	Industry	Institu-tional funds	All other sources
Total, all FFRDCs	11,536,424	11,095,113	30,303	135,721	122,772	152,515
Total, university-administered FFRDCs	7,069,245	6,810,095	16,095	38,356	92,735	111,964
Ames Laboratory	23,416	23,416	0	0	0	0
Argonne Natl Laboratory	506,666	469,426	7,921	0	0	29,319
AUI-Natl Radio Astronomy Observatory	43,900	43,684	0	0	216	0
Fermi Natl Accel Lab	313,556	313,556	0	0	0	0
Jet Propulsion Laboratory	1,435,039	1,435,039	0	0	0	0
Lawrence Berkeley Lab	467,461	407,166	3,196e	10,853e	0e	46,246e
Lawrence Livermore Lab	1,227,111	1,192,111	2,498	14,533	0	17,969
Los Alamos National Lab	1,994,031	1,884,284	42	4,919	90,869	13,917
MA Institute of Technology Lincoln Laboratory	451,200	443,883	1,550	5,367	0	400
Natl Astronomy and Ionosphere Ctr	12,295	11,137	0	0	1,016	142
Natl Ctr for Atmospheric Research	157,173	153,202	0	0	0	3,971
Natl Optical Astronomy Observatories	41,051	41,051	0	0	0	0
Plasma Physics Laboratory	73,610	72,976	0	0	634	0
Software Engineering Institute	45,088	42,267	137	2,684	0	0
Stanford Linear Accel Ctr	171,343	171,343	0	0	0	0
T J Natl Accel Facility	106,305	105,554	751	0	0	0
Total, nonprofit-administered FFRDCs	2,270,668	2,144,117	14,069	46,948	24,983	40,551
Aerospace Corporation	26,306	10,016	431	1,302	13,500	1,057
Arroyo Ctr Headquarters	24,484	24,484	0	0	0	0
Brookhaven Natl Lab	454,482	436,596	0	9,174	0	8,712
C31 FFRDC	31,163	31,163	0	0	0	0
Ctr for Advanced Aviation System Development	6,256	2,896	0	0	3,360	0
Ctr for Naval Analyses	72,712	68,318	95	0	4,299	0
Ctr for Nuclear Waste Regulatory Analyses	16,398	15,362	0	563	473	0
Inst for Defense Analyses Comm and Computing	45,296	45,296	0	0	0	0
Inst for Defense Analyses Studies and Analyses	98,236	98,236	0	0	0	0
IRS FFRDC	2,434	2,434	0	0	0	0
Natl Defense Research Institute	25,317	25,317	0	0	0	0
Natl Renewable Energy Research Laboratory	197,438	195,719	0	1,719	0	0
Oak Ridge Natl Laboratory	620,329	595,463	1,543	14,190	3,351	5,782
Pacific Northwest Natl Laboratories	608,500	551,500	12,000	20,000	0	25,000
Project Air Force	32,439	32,439	0	0	0	0
The Science and Technical Policy Institute	8,878	8,878	0	0	0	0

See explanatory information and SOURCE at end of table.

TABLE B-72. R&D expenditures at all federally funded research and development centers, by source of funds and type of federally funded research and development center: fiscal year 2002

(Dollars in thousands)

Institution	Total	Federal Government	State and local governments	Industry	Institu-tional funds	All other sources
Total, industry-administered FFRDCs	2,196,511	2,140,901	139	50,417	5,054	0
Idaho Natl Engineering and Environmental Lab	259,562	251,618	139	2,751	5,054	0
NCI Frederick Cancer Research and Development Ctr	260,000	260,000	0	0	0	0
Sandia Natl Laboratory	1,583,347	1,535,681	0	47,666	0	0
Savannah River Technology Ctr	93,602	93,602	0	0	0	0

e = estimated.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Research and Development Expenditures at Universities and Colleges, Fiscal Year 2002.

SECTION C.
LIST OF FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTERS: FY 2002

DEPARTMENT OF DEFENSE

Administered by universities and colleges:

- Lincoln Laboratory
  (Massachusetts Institute of Technology)
- Software Engineering Institute
  (Carnegie Mellon University)

Administered by other nonprofit organizations:

- Aerospace FFRDC
  (The Aerospace Corporation)
- Arroyo Center
  (RAND Corporation)
- C3I FFRDC
  (MITRE Corporation)
- Center for Naval Analyses
  (The CNA Corporation)
- Institute for Defense Analyses Communications and Computing FFRDC
  (Institute for Defense Analyses)
- Institute for Defense Analyses Studies and Analyses FFRDC
  (Institute for Defense Analyses)
- National Defense Research Institute
  (RAND Corporation)
- Project Air Force
  (RAND Corporation)

DEPARTMENT OF ENERGY

Administered by universities and colleges:

- Ames Laboratory
  (Iowa State University of Science and Technology)
- Argonne National Laboratory
  (University of Chicago and Argonne Universities Association)
- Ernest Orlando Lawrence Berkeley National Laboratory
  (University of California)
- Fermi National Accelerator Laboratory
  (Universities Research Association, Inc.)
- Lawrence Livermore National Laboratory
  (University of California)
- Los Alamos National Laboratory
  (University of California)
- Princeton Plasma Physics Laboratory
  (Princeton University)
- Stanford Linear Accelerator Center
  (Leland Stanford, Jr., University)
- Thomas Jefferson National Accelerator Facility
  (Southeastern Universities Research Association)

Administered by industrial firms:

- Idaho National Engineering and Environmental Laboratory
  (Bechtel BWXT Idaho, LLC)
- Sandia National Laboratories
  (Sandia Corporation, which is a subsidiary of Lockheed Martin Corporation)
- Savannah River Technology Center
  (Westinghouse Savannah River Co.)

Administered by other nonprofit organizations:

- Brookhaven National Laboratory
  (Brookhaven Science Associates, Inc.)
- National Renewable Energy Laboratory
  (Midwest Research Institute)
- Oak Ridge National Laboratory
  (UT-Battelle, LLC)
- Pacific Northwest National Laboratory
  (Battelle Memorial Institute)

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Administered by industrial firms:

- National Cancer Institute at Frederick
  (Science Applications International Corporation)

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Administered by universities and colleges:

- Jet Propulsion Laboratory
  (California Institute of Technology)

National Science Foundation

Administered by universities and colleges:

- National Astronomy and Ionosphere Center (Cornell University)
- National Center for Atmospheric Research (University Corporation for Atmospheric Research)
- National Optical Astronomy Observatories (Association of Universities for Research in Astronomy, Inc.)
- National Radio Astronomy Observatory (Associated Universities, Inc.)

Administered by other nonprofit institutions:

- The Science and Technology Policy Institute (RAND Corporation)

Nuclear Regulatory Commission

Administered by other nonprofit institutions:

- Center for Nuclear Waste Regulatory Analyses (Southwest Research Institute)

Department of Transportation

Administered by other nonprofit institutions:

- Center for Advanced Aviation System Development (MITRE Corporation)

Department of the Treasury

Administered by other nonprofit institutions:

- Internal Revenue Service (IRS) FFRDC (MITRE Corporation)

SECTION D. SURVEY INSTRUMENTS

CONTENTS

Items

Universities and Colleges Survey Instruments

Federally Funded Research and Development Centers Survey Instruments

NSF Form 411 (07-03)

FORM APPROVED
OMB No. 3145-0100
Expiration Date: 07/31/03

NATIONAL SCIENCE FOUNDATION
ARLINGTON, VA 22230

SURVEY OF RESEARCH AND DEVELOPMENT EXPENDITURES AT UNIVERSITIES AND COLLEGES, FY 2002

Organizations are requested to complete and return this form to:

ORC Macro
7315 Wisconsin Avenue, Suite 400W
Bethesda, MD 20814-3202

If you prefer, your response to the survey may be sent by e-mail to:

expweb@qrc.com

This form should be returned by March 31, 2003.

REMEMBER: Now you may submit your data and find all necessary definitions and instructions at http://www.qrc.com/expweb. Please note that your Web user ID and password were e-mailed to you with the survey information.

Your cooperation in returning the survey questionnaire promptly is very important.

This information is solicited under the authority of the National Science Foundation Act of 1950, as amended. Your response is entirely voluntary and your failure to provide some or all of the information will in no way adversely affect your institution.

All financial data requested on this form should be reported in thousands of dollars; for example, an expenditure of $25,342 should be rounded to the nearest thousand dollars and reported as $25.

Where exact data are not available, estimates are acceptable. Your estimates will be better than ours.

Include data for branches and all organizational units of your institution, such as medical schools and agricultural experiment stations. Data on research centers and facilities administered by your institution should be included. In addition, include hospitals or clinics owned, operated, or controlled by universities, and integrated operationally with the clinical programs of your medical schools.

NOTE: Academic institutions should exclude data for federally funded research and development centers (FFRDCs). Data for these facilities are collected separately.

Please correct if name or address has changed.

If you have any questions please contact Marge Machen of NSF at (703) 292-7786, or ORC Macro at 1-866-349-8626.

Financial data are requested for your institution's 2002 fiscal year.
Please circle the month in which your institution's fiscal year begins

1	2	3	4	5	6	7	8	9	10	11	12
JAN											DEC

It is estimated that response to this survey will require 22 hours. If you wish to comment on this burden, please contact Suzanne H. Plimpton of NSF at (703) 292-7556, or e-mail splimpto@nsf.gov.

How many person hours were required to complete this form?_____

Date submitted _____

Scope:

This survey collects data on expenditures by universities and colleges for separately budgeted research and development (R&D) in science and engineering. Definitions used are compatible with OMB Circular A-21, revised April 26, 1996. Items 1 and 2 ask for *current fund expenditures* by source of funds and by field of science and engineering. Item 3 collects data on that *portion of current fund expenditures* reported in Items 1 and 2 that went for the purchase of scientific and engineering research equipment.

Definitions:

Research and Development (R&D). R&D for purposes of this survey is the same as "organized research" as defined in Section B.1.b. of OMB Circular A-21 (revised). It includes all R&D activities of an institution that are *separately budgeted and accounted for.* R&D includes both "sponsored research" activities (sponsored by Federal and non-Federal agencies and organizations) and "university research" (separately budgeted under an internal application of institutional funds).

Research is systematic study directed toward fuller knowledge or understanding of the subject studied. Research is classified as either basic or applied, according to the objectives of the investigator.

Development is systematic use of the knowledge or understanding gained from research, directed toward the production of useful materials, devices, systems, or methods, including design and development of prototypes and processes.

Current fund expenditures. These are expenditures of funds available for current operations. Such expenditures include all unrestricted gifts and restricted current funds to the extent that such funds were expended for current operating purposes.

PERSON WHO SUBMITTED THIS FORM (PLEASE TYPE OR PRINT)

NAME:	TELEPHONE NUMBER:
TITLE:	E-MAIL:
	FAX:

PERSON WHO PREPARED THIS FORM (IF DIFFERENT FROM ABOVE)

NAME:	TELEPHONE NUMBER:
TITLE:	E-MAIL:
	FAX:

Instructions for Items 1 and 2

Separately budgeted research and development (R&D) includes all funds expended for activities specifically organized to produce research outcomes and commissioned by an agency either external to the institution or separately budgeted by an organizational unit within the institution. *Include* research equipment purchased under research project awards from "current fund" accounts. Also *include* research funds for which an outside organization, educational or other, is a subrecipient. *Exclude* training grants, public service grants, demonstration projects, clinical trials, and departmental research expenditures that are not separately budgeted. Also, *exclude* any R&D expenditures in the fields of education, law, humanities, music, the arts, physical education, library science, and all other non-science fields. Allocate funding to the original sources whenever possible, as specified below. If this information is unknown, report the proximate funding source.

Total

a. ***Federal Government.*** Report awards for R&D (including direct and reimbursed indirect costs) by all agencies of the Federal Government.

b. ***State and local governments.*** Include funds for R&D (including direct and reimbursed indirect costs) from State, county, municipal, or other local governments and their agencies. Include here State funds that support R&D at agricultural and other experiment stations.

c. ***Industry.*** Include all awards for R&D (including direct and reimbursed indirect costs) from profit-making organizations, whether engaged in production, distribution, research, service, or other activities. Do not include awards from nonprofit foundations financed by industry; these should be included under "All other sources."

d. ***Institution funds.*** Report funds, *including* related indirect costs, that your institution spent for R&D activities from the following unrestricted sources: general-purpose State or local government appropriations; general-purpose awards from industry, foundations, or other outside sources; tuition and fees; endowment income; gifts; and other institutional funds. In addition, estimate your institution's on-campus and off-campus unreimbursed indirect costs associated with externally funded R&D projects, including mandatory and voluntary cost sharing. To estimate unreimbursed indirect costs, preferably on a project-by-project basis, use your appropriate on-campus or off-campus ***negotiated research indirect cost rate(s)*** multiplied by the corresponding base(s) minus actual indirect cost recovery.

e. ***All other sources.*** Include awards for R&D (including direct and reimbursed indirect costs) from nonprofit foundations and voluntary health agencies as well as from all other sources not elsewhere classified. Also include gifts from individuals that are restricted by the donor to research. Funds from foundations that are affiliated with, or granted solely to your institution, should be included under "Institution funds." Funds for R&D received from a health agency that is a unit of a State or local government should be included under "State and local governments."

Instructions for Items 1A and 1B

For Federal awards, **subrecipient** means the entity that expends Federal awards received from a pass-through entity to carry out a Federal program, but does not include an individual that is a beneficiary of such a program. A subrecipient may also be a recipient of other Federal awards directly from a Federal awarding agency.
– *OMB Circular A-133, Section .105 (revised April 22, 1996)* For awards from non-Federal sources, the subrecipient definition is analogous to the Federal one.

Higher Education [subrecipients] refers to all academic colleges and universities and all units owned, operated, and controlled by such institutions.

Item 1. How much of your current fund expenditures for separately budgeted research and development in the sciences and engineering (including indirect costs) came from the following sources in FY 2002?

Source of Funds	Line No.	(1) Total (Dollars in Thousands)	(2) What Percentage of Federal & Total Funds Are Basic Research
a. Federal Government	1110	$	_____ %
b. State and local governments	1125		**Basic research** is directed toward an increase of knowledge; it is research where the primary aim of the **investigator** is a fuller knowledge or understanding of the subject under study rather than a specific application thereof.
c. Industry	1150		
d. Institution funds (sum of lines 1161 and 1162)	1160		
(1) Institutionally financed organized research	1161		
(2) Unreimbursed indirect costs and related sponsored research	1162		
e. All other sources	1175		
f. TOTAL (sum of a through e)	1100	$	_____ %

BASIC RESEARCH
Please provide the percentages of Federal and total expenditures that are basic research (not applied research) as defined in column (2).

CONFIDENTIALITY
Information received from individual institutions in lines 1161 and 1162, or estimates for basic research expenditures, will NOT be published or released; only aggregate totals will appear in tabulations.

Item 1A. How much of your total (item 1, line f) and Federal (item 1, line a) R&D expenditures were passed through by your institution to subrecipients? (If all information is not available, report those amounts that are available. Exclude vendor relationships.)

Subrecipients	Line No.	Dollars in Thousands	
		(1) Total	(2) Federal
To higher education subrecipients	1910		
To other subrecipients	1920		
To all subrecipients	1900		

Item 1B. How much of your total (item 1, line f) and Federal (item 1, line a) R&D expenditures did your institution receive as a subrecipient? (If all information is not available, report those amounts that are available. Exclude vendor relationships.)

Your Institution as a Subrecipient	Line No.	Dollars in Thousands	
		(1) Total	(2) Federal
From higher education pass-through entities	1610		
From other pass-through entities	1620		
From all pass-through entities	1600		

Item 2. Allocate your FY 2002 current fund expenditures (total and federally financed) for separately budgeted research and development (including indirect costs) by field of science and engineering

Please note that total R&D expenditures in line j, column (1) should be the same as reported in Item 1, line f.

Total Federal R&D expenditures in line j, column (2) should be the same as reported in Item 1, line a.

Please see pages 8 and 9 for the NSF/NCES Crosswalk of Discipline Codes.

Field of Science and Engineering	Line No.	(Dollars in thousands)	
		(1) Total	(2) Federal
a. ENGINEERING (TOTAL)	1410	$	$
(1) Aeronautical & astronautical	1411		
(2) Bioengineering/biomedical engineering	1418		
(3) Chemical	1412		
(4) Civil	1413		
(5) Electrical	1414		
(6) Mechanical	1415		
(7) Metallurgical & materials	1417		
(8) Other	1416		
b. PHYSICAL SCIENCES (TOTAL)	1420		
(1) Astronomy	1421		
(2) Chemistry	1422		
(3) Physics	1423		
(4) Other	1424		
c. ENVIRONMENTAL SCIENCES (TOTAL)	1430		
(1) Atmospheric	1431		
(2) Earth sciences	1432		
(3) Oceanography	1433		
(4) Other	1434		
d. MATHEMATICAL SCIENCES (TOTAL)	1441		
e. COMPUTER SCIENCES (TOTAL)	1442		
f. LIFE SCIENCES (TOTAL)	1450		
(1) Agricultural	1451		
(2) Biological	1452		
(3) Medical	1453		
(4) Other	1454		
g. PSYCHOLOGY (TOTAL)	1460		
h. SOCIAL SCIENCES (TOTAL)	1470		
(1) Economics	1471		
(2) Political science	1472		
(3) Sociology	1473		
(4) Other	1474		
i. OTHER SCIENCES, not elsewhere classified (TOTAL)	1480		
j. TOTAL (sum of a through i)	1400	$	$

Please EXCLUDE from your response any R&D expenditures in the fields of education, law, humanities, music, the arts, physical education, library science, and all other non-science and engineering fields.

Item 3. Allocate the portion of your FY 2002 current fund expenditures (total and federally financed) for separately budgeted research and development that went for the purchase of research equipment by field of science and engineering

Please report that portion of current fund expenditures reported in items 1 and 2 that went for the purchase of research equipment. This includes all research equipment purchased under sponsored research project awards from current fund accounts.

For column (1), report current fund expenditures for R&D from all sources: Federal Government, State, county, municipal or other governments and their agencies (including State funds supporting R&D at agricultural experiment stations); industry; institution funds; and private foundations and voluntary health agencies, individuals, and associations.

For column (2), include funds from awards for R&D sponsored by agencies of the Federal Government.

Please see pages 8 and 9 for the NSF/NCES Crosswalk of Discipline Codes.

Field of Science and Engineering	Line No.	(Dollars in thousands)	
		(1) Total	(2) Federal
a. ENGINEERING (TOTAL)	1810	$	$
(1) Aeronautical & astronautical	1811		
(2) Bioengineering/biomedical engineering	1818		
(3) Chemical	1812		
(4) Civil	1813		
(5) Electrical	1814		
(6) Mechanical	1815		
(7) Metallurgical & materials	1817		
(8) Other	1816		
b. PHYSICAL SCIENCES (TOTAL)	1820		
(1) Astronomy	1821		
(2) Chemistry	1822		
(3) Physics	1823		
(4) Other	1824		
c. ENVIRONMENTAL SCIENCES (TOTAL)	1830		
(1) Atmospheric	1831		
(2) Earth sciences	1832		
(3) Oceanography	1833		
(4) Other	1834		
d. MATHEMATICAL SCIENCES (TOTAL)	1841		
e. COMPUTER SCIENCES (TOTAL)	1842		
f. LIFE SCIENCES (TOTAL)	1850		
(1) Agricultural	1851		
(2) Biological	1852		
(3) Medical	1853		
(4) Other	1854		
g. PSYCHOLOGY (TOTAL)	1860		
h. SOCIAL SCIENCES (TOTAL)	1870		
(1) Economics	1871		
(2) Political science	1872		
(3) Sociology	1873		
(4) Other	1874		
i. OTHER SCIENCES, not elsewhere classified (TOTAL)	1880		
j. TOTAL (sum of a through i)	1800	$	$

Current fund expenditures in each field for scientific research equipment is that PORTION or SUBTOTAL of the amounts reported in the corresponding cells of the "Total" and "Federal" columns in Item 2.

Optional Item 2A. What were your current fund expenditures (total and federally financed) for separately budgeted research and development (including indirect costs) for non-science and engineering fields in FY 2002?

NOTE: For rows 2A(a) through 2A(i), report only data that have not been reported in Items 1 and 2 on this survey. Non-S&E R&D should **include** any separately budgeted scholarly and creative activity, but should **exclude** training.

Non-science & engineering fields	Line No.	(Dollars in thousands)	
		(1) Total	(2) Federal
a. EDUCATION	1510		
b. LAW	1520		
c. HUMANITIES	1530		
d. VISUAL & PERFORMING ARTS	1540		
e. BUSINESS AND MANAGEMENT	1550		
f. COMMUNICATIONS, JOURNALISM, AND LIBRARY SCIENCE	1560		
g. SOCIAL WORK	1570		
h. OTHER NON-S&E FIELDS (please specify)	1580		
i. TOTAL, NON-S&E FIELDS	1500		
j. TOTAL, S&E (from Item 2, line j)	1400		
k. GRAND TOTAL	1600		

NOTE: If you cannot provide expenditures by non-S&E fields, please provide the Total (column 1, line i) and Federal Total (column 2, line i).

CROSSWALK BETWEEN NSF NON-SCIENCE & ENGINEERING FIELDS AND THE NATIONAL CENTER FOR EDUCATION STATISTICS (NCES) CLASSIFICATION OF INSTRUCTIONAL PROGRAMS (CIP)

Questionnaire Field	CIP Code	CIP Program Category Title
Education	13.xx	Education
Law	22.xx	Law and Legal Studies
Humanities	16.xx	Foreign Languages & Literature
	23.xx	English Language and Literature/Letters
	24.xx	Liberal Arts & Sciences, General Studies & Humanities
	38.xx	Philosophy and Religion
	39.xx	Theological Studies and Religious Vocations
	45.08	History (except History of Science)
Visual & Performing Arts	50.xx	Visual and Performing Arts
Business and Management	52.xx	Business Management and Administrative Services
	08.xx	Marketing Operations/Marketing Distribution
Communications, Journalism, and Library Science	09.xx	Communications
	25.xx	Library Science
	10.xx	Communications Technologies
Social Work	44.07	Social Work
Other Non-S&E Fields	31.xx	Parks, Recreation, Leisure and Fitness Studies
	29.xx	Military Technologies

Optional Item 2B. What were the Federal Government agency sources for your FY 2002 federally financed current fund expenditures for separately budgeted research and development (including indirect costs) (item 2, column 2) by field of science and engineering?

Federally financed R&D expenditures in line j, column (1) should be the same as reported in Item 1, line a.

Allocate funding to the original sources whenever possible. If that information is unknown, report the proximate funding source.

KEY: USDA, Department of Agriculture; DoD, Department of Defense; DOE, Department of Energy; HHS, Department of Health and Human Services; NASA, National Aeronautics and Space Administration; NSF, National Science Foundation. "Other" Federal sources include all other Federal agencies.

		(Dollars in thousands)							
Field of science and engineering	Line No.	TOTAL FEDERAL	SPECIFIC FEDERAL AGENCIES						
			USDA	DoD	DOE	HHS*	NASA	NSF	Other
a. Engineering (Total)	1410								
(1) Aeronautical & astronautical	1411								
(2) Bioengineering/biomedical engineering	1418								
(3) Chemical	1412								
(4) Civil	1413								
(5) Electrical	1414								
(6) Mechanical	1415								
(7) Metallurgical & materials	1417								
(8) Other	1416								
b. Physical Sciences (Total)	1420								
(1) Astronomy	1421								
(2) Chemistry	1422								
(3) Physics	1423								
(4) Other	1424								
c. Environmental Sciences (Total)	1430								
(1) Atmospheric	1431								
(2) Earth sciences	1432								
(3) Oceanography	1433								
(4) Other	1434								
d. Mathematical Sciences (Total)	1441								
e. Computer Sciences (Total)	1442								
f. Life Sciences (Total)	1450								
(1) Agricultural	1451								
(2) Biological	1452								
(3) Medical	1453								
(4) Other	1454								
g. Psychology (Total)	1460								
h. Social Sciences (Total)	1470								
(1) Economics	1471								
(2) Political science	1472								
(3) Sociology	1473								
(4) Other	1474								
i. Other Sciences (Total)	1480								
j. Total (sum of a through i)	1400								

Please EXCLUDE from your response any R&D expenditures in the fields of education, law, humanities, music, the arts, physical education, library science, and all other non-science and engineering fields. * Includes NIH.

CROSSWALK BETWEEN NSF FIELDS OF SCIENCE & ENGINEERING AND THE NATIONAL CENTER FOR EDUCATION STATISTICS (NCES) CLASSIFICATION OF INSTRUCTIONAL PROGRAMS

The left-hand column shows each of the detailed fields as displayed on the questionnaire form. The right-hand column shows the NCES fields that are included within the NSF category as well as some additional illustrative disciplines. These additional disciplines are intended to be guidelines—not sharp definitions—as to what should be reported under a particular field.

Questionnaire Field	NCES Classification and Additional Illustrative Disciplines
a. ENGINEERING **(1) Aeronautical & Astronautical**	14.02 Aerospace, Aeronautical, and Astronautical Engineering (also aerodynamics, space technology)
(2) Bioengineering/ Biomedical Engineering	14.05 Bioengineering and Biomedical Engineering
(3) Chemical	03.0509 Wood Science (also petroleum refining process) 14.07 Chemical Engineering 14.32 Polymer/Plastics Engineering 14.25 Petroleum Engineering
(4) Civil	04.02 Architecture 14.04 Architectural Engineering 14.08 Civil Engineering 14.14 Environmental/Environmental Health Engineering (also geotechnical, hydraulic, hydrologic, sanitary and environmental, structural, transportation)
(5) Electrical	14.09 Computer Engineering (also power engineering) 14.10 Electrical, Electronics, and Communications Engineering
(6) Mechanical	14.11 Engineering Mechanics 14.19 Mechanical Engineering
(7) Metallurgical & Materials	14.06 Ceramic Sciences and Eng. 14.18 Materials Engineering 14.28 Textile Sciences and Eng. (also welding) 14.15 Geological Engineering 14.20 Metallurgical Engineering 14.31 Materials Science 14.16 Geophysical Engineering 14.21 Mining and Mineral Eng. 40.0701 Metallurgy
(8) Other	14.01 Engineering, General 14.13 Engineering Science 14.23 Nuclear Engineering 14.27 Systems Engineering 14.99 Engineering, Other (also marine and ocean engineering systems) 14.03 Agricultural Engineering 14.17 Industrial/Manufacturing Eng. 14.24 Ocean Engineering 14.29 Engineering Design 30.06 Systems Science and Theory 14.12 Engineering Physics 14.22 Naval Architecture and Marine Engineering 14.30 Eng./Industrial Management
b. PHYSICAL SCIENCES **(1) Astronomy**	40.02 Astronomy (also Gamma-ray, neutrino, optical and radio, X-ray) 40.03 Astrophysics
(2) Chemistry	40.05 Chemistry (also analytical, inorganic, organic, organo-metallic, pharmaceutical, physical, polymer sciences (except biochemistry))
(3) Physics	40.08 Physics (also acoustics, atomic/molecular, chemical, condensed matter, elementary particles, nuclear structure, optics, plasma, theoretical/mathematical)
(4) Other	40.01 Physical Sciences, General 40.0799 Miscellaneous Physical Sciences, Other 40.99 Physical Sciences, Other (used for multidisciplinary projects within physical sciences and for disciplines not requested separately)
c. ENVIRONMENTAL SCIENCES (Earth, Atmospheric, & Ocean) **(1) Atmospheric**	40.04 Atmospheric Sciences and Meteorology (also aeronomy, extraterrestrial atmospheres, solar, weather modification)
(2) Earth Sciences	15.1102 Surveying 40.0703 Earth & Planetary Sciences 40.06 Geological and Related Sciences 45.0702 Cartography (also engineering geophysics, general geology, geodesy and gravity, geomagnetism, hydrology, inorganic, isotopic, lab geophysics, organic geochemistry, paleomagnetism, paleontology, physical geography, seismology)
(3) Oceanography	26.0607 Marine/Aquatic Biology 40.0702 Oceanography (also biological, chemical, geological, physical)
(4) Other	(used for multidisciplinary projects within Earth, Atmospheric, and Ocean Sciences)
d. MATHEMATICAL SCIENCES	27.01 Mathematics, General 27.05 Mathematical Statistics 27.03 Applied Mathematics 27.99 Mathematics, Other 27.0302 Operations Research 30.08 Math./Computer Sciences (also algebra, analysis, foundations and logic, geometry, numerical analysis, topology)

Questionnaire Field	NCES Classification and Additional Illustrative Disciplines (cont.)
e. COMPUTER SCIENCES	11 Computer and Information Science, General 52.1201 Management Information Systems (also design, development, and application of computer capabilities to data storage and manipulation, information science)
f. LIFE SCIENCES **(1) Agricultural**	01.03 Agricultural Production 01.0303 Aquaculture 01.07 International Agriculture 02.01 Agricultural Sciences 02.04 Plant Sciences 02.05 Soil Science 03 Renewable Natural Resources 04.06 Landscape Architecture (also agricultural chemistry, agronomy, animal science, conservation, fish and wildlife, forestry, horticulture)
(2) Biological	19.05 Foods and Nutrition Studies 26.01 Biology, General 26.0202 Biochemistry 26.0203 Biophysics 26.03 Botany 26.04 Cell and Molecular Biology 26.05 Microbiology/Bacteriology 26.0601 Anatomy 26.0603 Ecology 26.0609 Nutritional Sciences 26.0610 Parasitology 26.0612 Toxicology 26.0613 Genetics, Plant and Animal 26.0614 Biometrics 26.0615 Biostatistics 26.0699 Misc. Bio. Specializations, Other 26.0701 Zoology 26.0702 Entomology 26.0704 Pathology, Human and Animal 26.0705 Pharmacology, Human and Animal 26.0706 Physiology, Human and Animal 26.0799 Zoology, Other 26.99 Biolog./Life Sciences, Other 51.1301 Medical Anatomy 51.1302 Medical Biochemistry 51.1307 Medical Immunology 51.1308 Medical Microbiology 51.1312 Medical Pathology 51.1313 Medical Physiology 51.1314 Medical Toxicology 51.2203 Epidemiology (also allergies and immunology, biogeography, biotechnology, pathology, physical anthropology, virology)
(3) Medical	26.0608 Neurosciences 26.0611 Radiation Biology/Radiobiol. 51.04 Dentistry 51.1201 Medicine, General 51.1399 Med. Basic Sciences, Other 51.1610 Nursing Psychiatry/ Mental Health 51.17 Optometry 51.19 Osteopathic Medicine 51.20 Pharmacy 51.21 Podiatry 51.22 Public Health 51.24 Veterinary Medicine[1] Anesthesiology Cardiology Colon and Rectal Surgery Dental/Oral Surgery Dermatology Family Medicine Gastroenterology General Surgery Geriatric Medicine Hematology Internal Medicine Medical Programs, Other Neonatal-Perinatal Medicine Neurological Surgery Neurology Nuclear Medicine Nuclear Radiology Obstetrics and Gynecology Oncology Ophthalmology Orthopedics/Orthopedic Surgery Otorhinolaryngology Pediatrics Pharmacology Physical and Rehabilitative Medicine Plastic Surgery Preventive Medicine Psychiatry Thoracic Surgery Urology (exclude all residency programs)
(4) Other	30.11 Gerontology 51.02 Communication Disorders Sciences and Services 51.07 Health and Medical Administrative Services 51.10 Health and Medical Laboratory Technologies 51.16 Nursing Technologies 51.2306 Occupational Therapy 51.2308 Physical Therapy 51.2399 Rehab./Therapeutic Services 51.99 Health Professions and Related Services, Other (used for multidisciplinary projects within life sciences)
g. PSYCHOLOGY	42.01 Psychology, General 42.02 Clinical Psychology 42.17 School Psychology 51.2301 Art Therapy (also animal behavior, educational, experimental, human development and personality, social)
h. SOCIAL SCIENCES **(1) Economics**	01.0103 Agricultural Economics 45.06 Economics 52.06 Business/Managerial Econ. (also applied, development, econometrics, industrial, international, labor, public finance and fiscal policy, quantitative, resource)
(2) Political Science	44.04 Public Administration 44.05 Public Policy Analysis 44.99 Public Admin. and Services, Other 45.09 International Relations and Affairs 45.10 Political Science and Government (also comparative government, legal systems, political theory, regional studies)
(3) Sociology	45.02 Anthropology (Social and Cultural only) 45.05 Demography and Population Studies 45.11 Sociology (also comparative and historical, complex organizations, cultural and social structure, group interactions, social problems and welfare theory)
(4) Other	04.03 City/Urban, Community, and Regional Planning 05 Area and Ethnic Studies 16.0102 Linguistics 43.01 Crim'l. Justice & Corrections 44.02 Community Services 45.01 Social Sciences, General 45.03 Archaeology 45.07 Geography 45.12 Urban Studies/Affairs 45.99 Social Sciences, Other (also history of science, socioeconomic geography)
i. OTHER SCIENCES, n.e.c.	(used when the multidisciplinary and interdisciplinary aspects make the classification under one primary field impossible)

[1] Institutions with schools of veterinary medicine should distribute R&D expenditures among the appropriate disciplines (agricultural, biological, and medical) rather than only in medical sciences.

This questionnaire has been printed on recycled paper.

Questions and Answers

This document answers common questions about the academic R&D expenditures survey.

Data Uses and Availability

How are these data typically used?

Congress has directed NSF to provide "a central clearinghouse for the collection, interpretation, and analysis of data on scientific and engineering resources and to provide a source of information for policy formulation by other agencies of the Federal Government...." As part of its response, the Division of Science Resources Statistics (SRS) conducts annual surveys of the research and development (R&D) expenditures at the Nation's universities and colleges.

Congress and Federal and State government planners use the data for science policy analysis, national and international studies, legislative hearing reports, budget formulation sessions, and other measurements of the adequacy of the Nation's research base. Academic institutions use the information for policy analysis, publicity, and other purposes. Industrial firms often request data to prepare for on-campus recruiting. The data often appear in higher education studies and publications.

How are the data made available?

NSF's annual *Academic Research and Development Expenditures Survey* compiles detailed data in a comprehensive document, available on request. Institutional profiles show trend data for responses at the institutional level from all academic science and engineering (S&E) surveys.

Survey data are now available on the Web. To obtain the most recent survey publications and data tables, data files, institutional profiles, and access to WebCASPAR, the Web-based Computer-Aided Science Policy Analysis and Research database system, direct your browser to http://www.nsf.gov/sbe/srs/stats.htm.

Field of Science Classifications

How should I assign field classifications for R&D performed in multidisciplinary centers?

Multidisciplinary research should be categorized by individual research project according to the nature of the research performed. When individual projects encompass multiple fields of S&E, prorate expenditures to report the proportions of each discipline involved. Do not lump funds together into "other" field categories unless the type of research is actually defined as "other." NSF recommends crediting such research to the appropriate S&E discipline when the project first begins.

How should I allocate research dollars spent for computing or supercomputing services?

Report research dollars spent for computer usage to the individual fields of science and engineering for which the R&D is performed. Do not report these funds in computer science, unless computer science research was performed.

What fields should be excluded from the science and engineering totals?

Exclude fields that are considered to be non-science—education, law, humanities, business, music, the arts, library science, and physical education. Note that you would report separately budgeted R&D for the philosophy of science (a science category), but not philosophy (one of the humanities). The NSF/NCES Crosswalk included with the questionnaire lists all S&E fields.

Basic Research

How should basic research be calculated?

The percentage of basic research should be defined at the individual grant level by each principal researcher. Where this is not possible, grants should be reviewed by each department head or other relevant research coordinator.

Here is another method used by one institution to estimate the amounts of basic and applied research: All federally funded grants and R&D funded from other universities, foundations, and nonprofit organizations are considered to be basic research. R&D funds received through Federal cooperative agreements and Federal contracts, all State-funded R&D (except that from the State's Advanced Research Program), and R&D funds received from private for-profit institutions are considered to be applied research.

Sources of Funding

Should faculty practice plan income be included in the survey?

Expenditures for faculty practice plans are not considered research and should not be included. If income from such plans is used to fund other research and the funds are separately budgeted, then the expenditures should be included in institutional funds.

How much of our administrative costs can be reported in the survey?

Administrative salaries and other administrative costs, particularly at your organized research units, can be reported only if funded through projects specifically restricted and budgeted for research. General administrative costs should not be reported.

How should I report institutional funds?

All research dollars reported for your institution should be funds that are separately budgeted and restricted for research, such as sponsored research accounts or general accounts that are specifically budgeted for research. Do not include funds not specifically budgeted for research.

If your institution does not track underrecovery of indirect costs, use the underrecovery formula included in the questionnaire instructions. Do not forget to include and distribute unreimbursed indirect costs by detailed field in survey Item 2.

Be sure to report all indirect costs related to your institutional funds.

Can I report donated research equipment in the survey?

Since donated research equipment is not typically captured in university accounting systems, the value of donated research equipment should not be reported.

Collaborative Research Arrangements

Should I report expenditures received through collaborative research ventures with other institutions?

Report only what your institution actually expends and accounts for when participating in joint research ventures.

How do I distinguish between being a subrecipient of pass-through funds and being a subcontractor of R&D services?

For Federal awards, a subrecipient is an entity that receives Federal financial assistance from the State or any other entity to administer a program (OMB Circular A-110). The subrecipient actually administers or controls the program, as opposed to the subcontractor who contracts for a specific service on a per-unit basis. A key factor in determining if a subrecipient arrangement exists is determining if the entity assumes the responsibility to administer the program. Subrecipients tend to be the co-authors of publications, writers of technical reports discussing findings, inventors, etc. Unlike a subrecipient relationship, a subcontract is a procurement of goods and/or services. Payments to subcontractors are expenditures for services, not expenditures for research, and are different from pass-through funds to subrecipients.

Organizational Units

Which organizational units should I include in the survey?

Include research conducted through units that are considered part of your institution's organizational structure. For example, report expenditures from branch campuses, medical schools, agricultural stations, research centers and institutes, and any other units whose expenditures are separately budgeted **and are accounted for by your institution's financial system.** Exclude R&D expenditures performed by federally funded research and development centers (FFRDCs), nonprofit institutions, and private laboratories. Do not report salaries of faculty doing research at outside institutions unless your institution accounts for the funding of that research.

For more information, contact Marge Machen at (703) 292-7786 (e-mail: mmachen@nsf.gov).

Academic R&D Expenditures On The Web!

Security: Your data are password-protected to ensure confidentiality.

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On your computer, open your Web browser (such as Netscape Navigator or Microsoft Internet Explorer) and visit http://www.qrc.com/expweb.

Log in by entering the Institution ID and password you received from NSF. (If you forget them, e-mail us at expweb@qrc.com.)

Then you can . . .

- update your contact information
- enter survey data

You Can Also

- print the finished survey on paper for your records
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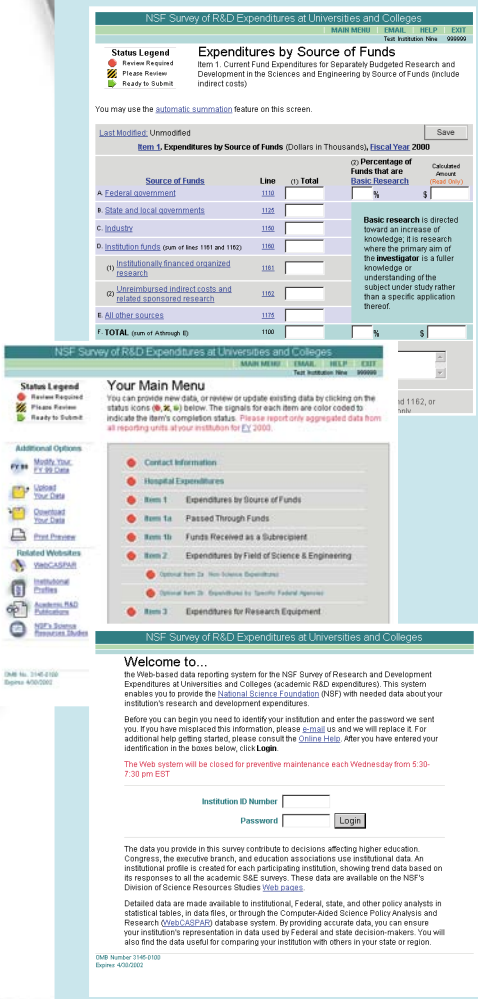
For Further Information

If you have any questions about this Web survey, please contact ORC Macro by telephone at 1-866-349-8626 or by e-mail at expweb@qrc.com. For any other survey data questions, please contact Marge Machen of NSF at (703) 292-7786 or by e-mail at mmachen@nsf.gov.



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NSF Form 411 (07-03)

FORM APPROVED
OMB No. 3145-0100
Expiration Date: 07/31/03

NATIONAL SCIENCE FOUNDATION
ARLINGTON, VA 22230

SURVEY OF RESEARCH AND DEVELOPMENT EXPENDITURES FY 2002

Organizations are requested to complete and return this form to:

ORC Macro
7315 Wisconsin Avenue, Suite 400W
Bethesda, MD 20814-3202

If you prefer, your response to the survey may be sent by e-mail to:
expweb@qrc.com

This form should be returned by March 31, 2003.

REMEMBER: Now you may submit your data and find all necessary definitions and instructions at http://www.qrc.com/expweb. Please note that your Web user ID and password were e-mailed to you with the survey information.

Your cooperation in returning the survey questionnaire promptly is very important.

This information is solicited under the authority of the National Science Foundation Act of 1950, as amended. Your response is entirely voluntary and your failure to provide some or all of the information will in no way adversely affect your institution.

All financial data requested on this form should be reported in thousands of dollars; for example, an expenditure of $25,342 should be rounded to the nearest thousand dollars and reported as $25.

Where exact data are not available, estimates are acceptable. Your estimates will be better than ours.

Please correct if name or address has changed.

If you have any questions please contact Marge Machen of NSF at (703) 292-7786, or call ORC Macro at 1-866-349-8626.

Financial data are requested for your institution's 2002 fiscal year.
Please circle the month in which your institution's fiscal year begins

1	2	3	4	5	6	7	8	9	10	11	12
JAN											DEC

It is estimated that response to this survey will require 4 hours. If you wish to comment on this burden, please contact Suzanne H. Plimpton of NSF at (703) 292-7556, or email splimpto@nsf.gov.

How many person hours were required to complete this form? _____

Date submitted _____

Scope:

This survey contains one question which requests data on *current fund expenditures* by source of funds for separately budgeted research and development (R&D) in science and engineering. Definitions used are compatible with OMB Circular A-21, revised April 26, 1996.

Definitions:

Research and Development (R&D). R&D for purposes of this survey is the same as "organized research" as defined in Section B.1.b. of OMB Circular A-21 (revised). It includes all R&D activities that are *separately budgeted and accounted for.*

Research is systematic study directed toward fuller knowledge or understanding of the subject studied. Research is classified as either basic or applied, according to the objectives of the investigator.

Development is systematic use of the knowledge or understanding gained from research, directed toward the production of useful materials, devices, systems, or methods, including design and development of prototypes and processes.

Current fund expenditures. These are expenditures of funds available for current operations. Such expenditures include all unrestricted gifts and restricted current funds to the extent that such funds were expended for current operating purposes.

PERSON WHO SUBMITTED THIS FORM (PLEASE TYPE OR PRINT)

NAME:	TELEPHONE NUMBER:
TITLE:	EMAIL:
	FAX:

PERSON WHO PREPARED THIS FORM (IF DIFFERENT FROM ABOVE)

NAME:	TELEPHONE NUMBER:
TITLE:	EMAIL:
	FAX:

Instructions

Separately budgeted research and development (R&D) includes all funds expended for activities specifically organized to produce research outcomes and commissioned by an agency either external to the institution or separately budgeted by an organizational unit within the institution. *Include* research equipment purchased under research project awards from "current fund" accounts. Also *include* research funds for which an outside organization is a subrecipient. *Exclude* training grants, public service grants, demonstration projects, clinical trials, and research expenditures that are not separately budgeted. Allocate funding to the original sources whenever possible, as specified below. If this information is unknown, report the proximate funding source.

Total

a. ***Federal Government.*** Report awards for R&D (including direct and reimbursed indirect costs) by all agencies of the Federal Government.

b. ***State and local governments.*** Include funds for R&D (including direct and reimbursed indirect costs) from State, county, municipal, or other local governments and their agencies.

c. ***Industry.*** Include all awards for R&D (including direct and reimbursed indirect costs) from profit-making organizations, whether engaged in production, distribution, research, service, or other activities. Do not include awards from nonprofit foundations financed by industry; these should be included under "All other sources."

d. ***Institution funds.*** Report funds, *including* related indirect costs, that your institution spent for R&D activities from the following unrestricted sources: general-purpose awards from industry, foundations, or other outside sources, and other institutional funds. In addition, estimate your institution's unreimbursed indirect costs associated with externally funded R&D projects, including mandatory and voluntary cost sharing. To estimate unreimbursed indirect costs, preferably on a project-by-project basis, use your appropriate ***negotiated research indirect cost rate(s)*** multiplied by the corresponding base(s) minus actual indirect cost recovery.

e. ***All other sources.*** Include awards for R&D (including direct and reimbursed indirect costs) from nonprofit foundations and voluntary health agencies as well as from all other sources not elsewhere classified. Also include gifts from individuals that are restricted by the donor to research. Funds from foundations that are affiliated with, or granted solely to your institution, should be included under "Institution funds." Funds for R&D received from a health agency that is a unit of a State or local government should be included under "State and local governments."

How much of your current fund expenditures for separately budgeted research and development in the sciences and engineering (including indirect costs) came from the following sources in FY 2002?

Source of Funds	Line No.	(1) Total (Dollars in Thousands)	(2) What Percentage of Federal & Total Funds Are Basic Research
a. Federal Government	1110	$	_____ %
b. State and local governments	1125		**Basic research** is directed toward an increase of knowledge; it is research where the primary aim of the **investigator** is a fuller knowledge or understanding of the subject under study rather than a specific application thereof.
c. Industry	1150		
d. Institution funds (sum of lines 1161 and 1162)	1160		
(1) Institutionally financed organized research	1161		
(2) Unreimbursed indirect costs and related sponsored research	1162		
e. All other sources	1175		
f. TOTAL (sum of a through e)	1100	$	_____ %

BASIC RESEARCH
Please provide the percentages of Federal and total expenditures that are basic research (not applied research) as defined in column (2).

CONFIDENTIALITY
Information received from individual institutions in lines 1161 and 1162, or estimates for basic research expenditures, will NOT be published or released; only aggregate totals will appear in tabulations.