General Notes

Data in these tables were derived from the National Science Foundation's (NSF's) annual surveys of Federal Funds for Research and Development and cover fiscal years 1970–2003. They reflect research funding levels as reported by Federal agencies in the survey series. All agencies that were identified as conducting R&D programs were surveyed.

Research totals in these tables are given in obligations. The research obligation data are further categorized according to character of work (basic research and applied research) and field of science or engineering.

The amounts reported for each year are expressed in obligations incurred or expected to be incurred in that year regardless of when the funds may have been authorized, appropriated, or received by an agency and regardless of whether the funds are identified in an agency's budget specifically for research.

Data for 1970 through 2001 are actual, representing completed transactions. Data for 2002 and 2003 are estimated because they do not represent final actions. The latest Survey of Federal Funds for Research and Development data used in these tables were collected during the second quarter of fiscal year 2002. The amounts reported for 2002 reflect congressional appropriation actions as of that period, as well as apportionment and reprogramming decisions as of that time. Data for 2003 represent administration budget proposals that had not been acted on. Authorization, appropriation, deferral, and apportionment actions that were completed after these data were collected will be reflected in later surveys of this series.

While completing the survey each year, agency respondents make revisions to their estimates for the latest 2 years of the previous report, in this case fiscal years 2001 and 2002. Such revision is part of the budgetary cycle. From time to time, survey submissions also reflect reappraisals and revisions in classification of various aspects of agencies' R&D programs. When such revisions occur, NSF requires the agencies to provide revised prior-year data to maintain consistency and comparability with the most recent concepts.

Accuracy of the data depends in part on the judgment of respondents. Because many agency R&D programs are not identified as budget-line items, agency officials must identify R&D and R&D plant activities within broader programs. Over the years personnel of the participating agencies have developed increasing skill and consistency in meeting the survey requirements, and their interaction with NSF staff has considerably increased the reliability of the data.

Definitions

1. An agency is an organization of the Federal Government whose principal executive officer reports to the President. The Library of Congress is also included in the survey, even though its chief officer reports to Congress.

2. Obligations represent the amounts for orders placed, contracts awarded, services received, and similar transactions during a given period, regardless of when the funds were appropriated and when future payment of money is required. Obligations cover all transactions that occurred in fiscal years 1970 through 2001 and those estimated for fiscal years 2002 and 2003.

   The amounts shown for each year reflect obligations for that year regardless of when the funds were originally authorized or received and regardless of whether they were appropriated, received, or identified in the agency's budget specifically for research.

3. Research is systematic study directed toward fuller scientific knowledge or understanding of the subject studied. Research is classified as either basic or applied according to the objectives of the sponsoring agency.

   Basic research is defined as systematic study directed toward fuller knowledge or understanding of the fundamental aspects of phenomena and of observable facts without specific applications towards processes or products in mind.

   Applied research is defined as systematic study to gain knowledge or understanding necessary to determine the means by which a recognized and specific need may be met.

4. Fields of science and engineering in the annual Survey of Federal Funds for Research and Development consist of eight broad field categories, each consisting of a number of detailed fields. The broad fields are life sciences; psychology; physical sciences; environmental sciences; mathematics and computer sciences; engineering; social sciences; and other sciences, not elsewhere classified. The term "not elsewhere classified" (n.e.c.) is used for multidisciplinary projects within a broad field and for single-discipline projects for which a separate field has not been assigned.