

# NATIONAL SCIENCE FOUNDATION

## NATIONAL SCIENCE FOUNDATION

### Federal Funds

#### General and special funds:

#### RESEARCH AND RELATED ACTIVITIES

For necessary expenses in carrying out the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-1875), and the Act to establish a National Medal of Science (42 U.S.C. 1880-1881); services as authorized by 5 U.S.C. 3109; *authorized travel*; maintenance and operation of aircraft and purchase of flight services for research support; acquisition of aircraft; [\$2,966,000,000] \$3,540,680,000, of which not to exceed [\$253,000,000] \$285,410,000 shall remain available until expended for Polar research and operations support, and for reimbursement to other Federal agencies for operational and science support and logistical and other related activities for the United States Antarctic program; the balance to remain available until September 30, [2001] 2002: *Provided*, That receipts for scientific support services and materials furnished by the National Research Centers and other National Science Foundation supported research facilities may be credited to this appropriation: *Provided further*, That to the extent that the amount appropriated is less than the total amount authorized to be appropriated for included program activities, all amounts, including floors and ceilings, specified in the authorizing Act for those program activities or their subactivities shall be reduced proportionally: *Provided further*, That \$60,000,000 of the funds available under this heading shall be made available for a comprehensive research initiative on plant genomes for economically significant crop: *Provided further*, That none of the funds appropriated or otherwise made available to the National Science Foundation in this or any prior Act may be obligated or expended by the National Science Foundation to enter into or extend a grant, contract, or cooperative agreement for the support of administering the domain name and numbering system of the Internet after September 30, 1998: *Provided further*, That no funds in this or any other Act shall be used to acquire or lease a research vessel with ice-breaking capability built or retrofitted by a shipyard located in a foreign country if such a vessel of United States origin can be obtained at a cost no more than 50 per centum above that of the least expensive technically acceptable foreign vessel bid: *Provided further*, That, in determining the cost of such a vessel, such cost be increased by the amount of any subsidies or financing provided by a foreign government (or instrumentality thereof) to such vessel's construction: *Provided further*, That if the vessel contracted for pursuant to the foregoing is not available for the 2002-2003 austral summer Antarctic season, a vessel of any origin may be leased for a period of not to exceed 120 days for that season and each season thereafter until delivery of the new vessel]. (*Departments of Veterans Affairs and Housing and Urban Development, and Independent Agencies Appropriations Act, 2000.*)

#### Program and Financing (in millions of dollars)

| Identification code 49-0100-0-1-999                          | 1999 actual | 2000 est. | 2001 est. |
|--|-------------|-----------|-----------|
| <b>Obligations by program activity:</b>                      |             |           |           |
| Direct program:  |             |           |           |
| 00.01 Biological sciences .....                              | 392         | 414       | 511       |
| 00.02 Computer and information science and engineering ..... | 299         | 388       | 529       |
| 00.03 Engineering .....                                      | 370         | 382       | 457       |
| 00.05 Geosciences .....                                      | 478         | 488       | 583       |
| 00.06 Mathematical and physical sciences .....               | 734         | 758       | 881       |
| 00.07 Social, behavioral and economic sciences .....         | 142         | 146       | 175       |
| 00.09 U.S. Polar research programs .....                     | 183         | 190       | 223       |
| 00.10 U.S. Antarctic logistical support activities .....     | 63          | 63        | 63        |
| 00.11 Integrative activities .....                           | 161         | 129       | 119       |
| 09.01 Reimbursable programs .....                            | 84          | 100       | 100       |
| 10.00 Total new obligations .....                            | 2,906       | 3,058     | 3,641     |
| <b>Budgetary resources available for obligation:</b>         |             |           |           |
| 21.40 Unobligated balance available, start of year .....     | 41          | 2         | .....     |

|   |        |        |        |
|---|--------|--------|--------|
| 22.00 New budget authority (gross) .....  | 2,853  | 3,058  | 3,641  |
| 22.10 Resources available from recoveries of prior year obligations .....           | 16     | .....  | .....  |
| 23.90 Total budgetary resources available for obligation .....                      | 2,910  | 3,060  | 3,641  |
| 23.95 Total new obligations .....   | -2,906 | -3,058 | -3,641 |
| 23.98 Unobligated balance expiring or withdrawn .....                               | -2     | .....  | .....  |
| 24.40 Unobligated balance available, end of year .....                              | 2      | .....  | .....  |
| <b>New budget authority (gross), detail:</b>  |        |        |        |
| Discretionary:  |        |        |        |
| 40.00 Appropriation .....   | 2,770  | 2,966  | 3,541  |
| 40.75 Reduction pursuant to P.L. 106-51 .....                                       | -1     | .....  | .....  |
| 40.76 Reduction pursuant to P.L. 106-113 .....                                      | .....  | -8     | .....  |
| 42.00 Transferred from other accounts .....   | 5      | .....  | .....  |
| 43.00 Appropriation (total discretionary) .....                                     | 2,774  | 2,958  | 3,541  |
| Spending authority from offsetting collections:                                     |        |        |        |
| 68.00 Offsetting collections (cash) .....   | 68     | 100    | 100    |
| 68.10 From Federal sources: Change in receivables and unpaid, unfilled orders ..... | 11     | .....  | .....  |
| 68.90 Spending authority from offsetting collections (total discretionary) .....    | 79     | 100    | 100    |
| 70.00 Total new budget authority (gross) .....                                      | 2,853  | 3,058  | 3,641  |
| <b>Change in unpaid obligations:</b>  |        |        |        |
| Unpaid obligations, start of year:  |        |        |        |
| 72.40 Obligated balance, start of year .....  | 2,770  | 3,174  | 3,527  |
| 72.95 From Federal sources: Receivables and unpaid, unfilled orders .....           | 7      | 18     | 18     |
| 72.99 Total unpaid obligations, start of year .....                                 | 2,777  | 3,192  | 3,545  |
| 73.10 Total new obligations .....   | 2,906  | 3,058  | 3,641  |
| 73.20 Total outlays (gross) .....   | -2,461 | -2,705 | -3,063 |
| 73.40 Adjustments in expired accounts (net) .....                                   | -15    | .....  | .....  |
| 73.45 Adjustments in unexpired accounts .....                                       | -16    | .....  | .....  |
| Unpaid obligations, end of year:  |        |        |        |
| 74.40 Obligated balance, end of year .....  | 3,174  | 3,527  | 4,105  |
| 74.95 From Federal sources: Receivables and unpaid, unfilled orders .....           | 18     | 18     | 18     |
| 74.99 Total unpaid obligations, end of year .....                                   | 3,192  | 3,545  | 4,123  |
| <b>Outlays (gross), detail:</b>   |        |        |        |
| 86.90 Outlays from new discretionary authority .....                                | 674    | 768    | 902    |
| 86.93 Outlays from discretionary balances .....                                     | 1,785  | 1,937  | 2,161  |
| 87.00 Total outlays (gross) .....   | 2,461  | 2,705  | 3,063  |
| <b>Offsets:</b>   |        |        |        |
| Against gross budget authority and outlays:   |        |        |        |
| 88.00 Offsetting collections (cash) from: Federal sources .....                     | -68    | -100   | -100   |
| Against gross budget authority only:  |        |        |        |
| 88.95 From Federal sources: Change in receivables and unpaid, unfilled orders ..... | -11    | .....  | .....  |
| <b>Net budget authority and outlays:</b>  |        |        |        |
| 89.00 Budget authority .....  | 2,774  | 2,958  | 3,541  |
| 90.00 Outlays .....   | 2,393  | 2,605  | 2,963  |

The research and related activities appropriation enables the United States to uphold world leadership in all aspects of science and engineering. This appropriation provides resources for NSF to achieve the following outcome goals: discoveries at and across the frontier of science and engineering, and connections to its use in the service of society; a diverse, internationally competitive and globally-engaged workforce of scientists, engineers and well-prepared citizens; and broadly accessible, state-of-the-art information bases and shared research and education tools. Research activities will contribute to the achievement of these goals through development of intellectual capital, integration of research and education, and

**General and special funds—Continued**

**RESEARCH AND RELATED ACTIVITIES—Continued**

promotion of partnerships. This appropriation supports NSF's active development of performance indicators.

Program activities in the research and related activities appropriation are included in the 21st Century research fund.

The major research program activities of the Foundation are:

*Biological sciences.*—This activity promotes scientific progress in biology through support of research ranging from the study of molecules, through cells and organisms, to studies of ecosystems. This activity also supports a comprehensive research initiative on plant genomes, including research on economically significant crops.

*Computer and information sciences and engineering.*—Research is directed at “information technology” in the broadest sense of the term, ranging from fundamental theory to systems engineering.

*Engineering.*—Research supported by this activity aims to increase U.S. engineering capability and strength, and focus that capability and strength on areas which are relevant to national problems and long-term needs. This activity also includes small business innovation research.

*Geosciences.*—This research advances knowledge of the properties and dynamics of the planet Earth.

*Mathematical and physical sciences.*—Research in this activity is directed at increasing understanding of natural laws and phenomena. It includes research in mathematical sciences, astronomy, physics, chemistry, and materials science.

*Social, behavioral and economic sciences.*—This activity supports research in social, behavioral and economic sciences, facilitates international scientific cooperation, and funds science resources studies.

*U.S. polar research programs.*—This activity supports Arctic and Antarctic research and operational science support and other related activities for the United States polar research programs. This activity includes funding for the expenses of the Arctic Research Commission.

*U.S. Antarctic logistical support activities.*—This activity provides funding for reimbursing Federal agencies for logistical and other related activities for the United States Antarctic program.

*Integrative activities.*—This activity supports emerging cross-disciplinary research efforts and major research instrumentation. This activity also provides support for the Science and Technology Policy Institute.

**Object Classification (in millions of dollars)**

| Identification code 49-0100-0-1-999                                 | 1999 actual | 2000 est. | 2001 est. |
|---|-------------|-----------|-----------|
| <b>Direct obligations:</b>  |             |           |           |
| 21.0 Travel and transportation of persons .....                     | 5           | 7         | 10        |
| 25.1 Advisory and assistance services .....                         | 15          | 16        | 23        |
| 25.2 Other services .....   | 3           | 3         | 3         |
| 25.3 Purchases of goods and services from Government accounts ..... | 2           | 2         | 2         |
| 25.4 Operation and maintenance of facilities .....                  | 125         | 125       | 125       |
| 25.5 Research and development contracts .....                       | 25          | 25        | 25        |
| 31.0 Equipment .....  | 1           | 1         | 1         |
| 41.0 Grants, subsidies, and contributions .....                     | 2,646       | 2,779     | 3,352     |
| 99.0 Subtotal, direct obligations .....                             | 2,822       | 2,958     | 3,541     |
| 99.0 Reimbursable obligations .....                                 | 83          | 100       | 100       |
| 99.5 Below reporting threshold .....                                | 1           |           |           |
| 99.9 Total new obligations .....                                    | 2,906       | 3,058     | 3,641     |

**Personnel Summary**

| Identification code 49-0100-0-1-999                                     | 1999 actual | 2000 est. | 2001 est. |
|---|-------------|-----------|-----------|
| 1001 Total compensable workyears: Full-time equivalent employment ..... | 3           | 3         | 4         |

**ACADEMIC RESEARCH INFRASTRUCTURE**

**Program and Financing (in millions of dollars)**

| Identification code 49-0150-0-1-251   | 1999 actual | 2000 est. | 2001 est. |
|---|-------------|-----------|-----------|
| <b>Budgetary resources available for obligation:</b>                            |             |           |           |
| 22.10 Resources available from recoveries of prior year obligations .....       | 2           |           |           |
| <b>Change in unpaid obligations:</b>  |             |           |           |
| 72.40 Unpaid obligations, start of year: Obligated balance, start of year ..... | 74          | 35        | 16        |
| 73.20 Total outlays (gross) .....   | -37         | -19       | -11       |
| 73.40 Adjustments in expired accounts (net) .....                               | -1          |           |           |
| 73.45 Adjustments in unexpired accounts .....                                   | -2          |           |           |
| 74.40 Unpaid obligations, end of year: Obligated balance, end of year .....     | 35          | 16        | 5         |
| <b>Outlays (gross), detail:</b>   |             |           |           |
| 86.93 Outlays from discretionary balances .....                                 | 37          | 19        | 11        |
| <b>Net budget authority and outlays:</b>  |             |           |           |
| 89.00 Budget authority .....  |             |           |           |
| 90.00 Outlays .....   | 37          | 19        | 11        |

The academic research infrastructure facilities activity has been terminated. A program to support the acquisition of major research instrumentation has been funded through the research and related activities appropriation since 1997. This account shows spending from balances prior to the account restructuring.

**MAJOR RESEARCH EQUIPMENT**

For necessary expenses of major construction projects pursuant to the National Science Foundation Act of 1950, as amended, [including award-related travel, \$95,000,000] including authorized travel, \$138,540,000, to remain available until expended. For necessary expenses of the Large Hadron Collider, to become available on October 1 of the fiscal year specified and remain available until expended, as follows: fiscal year 2002, \$16,900,000; and fiscal year 2003, \$9,700,000. For necessary expenses of the Network for Earthquake Engineering Simulation, to become available on October 1 of the fiscal year specified and remain available until expended, as follows: fiscal year 2002, \$24,400,000; fiscal year 2003, \$4,500,000; and fiscal year 2004, \$17,000,000. For necessary expenses of the Terascale Computing System, to become available on October 1, 2001 and remain available until expended, \$55,000,000. For necessary expenses of EarthScope: U.S. Array and San Andreas Fault Observatory at Depth, to become available on October 1 of the fiscal year specified and remain available until expended, as follows: fiscal year 2002, \$28,460,000; fiscal year 2003, \$15,740,000; and fiscal year 2004, \$13,170,000. For necessary expenses of the National Ecological Observatory Network, to become available on October 1 of the fiscal year specified and remain available until expended, as follows: fiscal year 2002, \$20,000,000; fiscal year 2003, \$27,000,000; fiscal year 2004, \$20,000,000; and fiscal year 2005, \$14,000,000. (Departments of Veterans Affairs and Housing and Urban Development, and Independent Agencies Appropriations Act, 2000.)

**Program and Financing (in millions of dollars)**

| Identification code 49-0551-0-1-251                            | 1999 actual | 2000 est. | 2001 est. |
|--|-------------|-----------|-----------|
| <b>Obligations by program activity:</b>                        |             |           |           |
| 10.00 Total new obligations .....                              | 57          | 161       | 139       |
| <b>Budgetary resources available for obligation:</b>           |             |           |           |
| 21.40 Unobligated balance available, start of year .....       | 35          | 68        |           |
| 22.00 New budget authority (gross) .....                       | 90          | 93        | 139       |
| 23.90 Total budgetary resources available for obligation ..... | 125         | 161       | 139       |
| 23.95 Total new obligations .....                              | -57         | -161      | -139      |
| 24.40 Unobligated balance available, end of year .....         | 68          |           |           |
| <b>New budget authority (gross), detail:</b>                   |             |           |           |
| Discretionary:   |             |           |           |
| 40.00 Appropriation .....                                      | 90          | 95        | 139       |

|  |   |     |     |     |
|--|---|-----|-----|-----|
| 40.76                                    | Reduction pursuant to P.L. 106-113 .....                                  |     | -2  |     |
| 43.00                                    | Appropriation (total discretionary) .....                                 | 90  | 93  | 139 |
| <b>Change in unpaid obligations:</b>     |   |     |     |     |
| 72.40                                    | Unpaid obligations, start of year: Obligated balance, start of year ..... | 72  | 29  | 117 |
| 73.10                                    | Total new obligations .....   | 57  | 161 | 139 |
| 73.20                                    | Total outlays (gross) .....   | -99 | -73 | -90 |
| 74.40                                    | Unpaid obligations, end of year: Obligated balance, end of year .....     | 29  | 117 | 166 |
| <b>Outlays (gross), detail:</b>          |   |     |     |     |
| 86.90                                    | Outlays from new discretionary authority .....                            | 40  | 10  | 15  |
| 86.93                                    | Outlays from discretionary balances .....                                 | 59  | 63  | 75  |
| 87.00                                    | Total outlays (gross) .....   | 99  | 73  | 90  |
| <b>Net budget authority and outlays:</b> |   |     |     |     |
| 89.00                                    | Budget authority .....  | 90  | 93  | 139 |
| 90.00                                    | Outlays .....   | 99  | 73  | 90  |

**Object Classification (in millions of dollars)**

| Identification code 49-0551-0-1-251             | 1999 actual | 2000 est. | 2001 est. |
|---|-------------|-----------|-----------|
| 25.5 Research and development contracts .....   | 26          | 85        | 14        |
| 41.0 Grants, subsidies, and contributions ..... | 31          | 76        | 125       |
| 99.9 Total new obligations .....                | 57          | 161       | 139       |

The major research equipment activity supports the construction and procurement of unique national research platforms and major research equipment. Performance is measured against established construction schedules, costs and milestones.

Funding for major research equipment is included in the 21st Century research fund.

**SALARIES AND EXPENSES**

For salaries and expenses necessary in carrying out the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-1875); services authorized by 5 U.S.C. 3109; hire of passenger motor vehicles; not to exceed \$9,000 for official reception and representation expenses; uniforms or allowances therefor, as authorized by 5 U.S.C. 5901-5902; rental of conference rooms in the District of Columbia; reimbursement of the General Services Administration for security guard services; **[\$149,000,000] \$157,890,000: Provided, That contracts may be entered into under "Salaries and expenses" in fiscal year [2000] 2001 for maintenance and operation of facilities, and for other services, to be provided during the next fiscal year. (Departments of Veterans Affairs and Housing and Urban Development, and Independent Agencies Appropriations Act, 2000.)**

**Program and Financing (in millions of dollars)**

| Identification code 49-0180-0-1-251   | 1999 actual | 2000 est. | 2001 est. |
|---|-------------|-----------|-----------|
| <b>Obligations by program activity:</b>   |             |           |           |
| 00.01 Administration and management .....   | 144         | 149       | 158       |
| 09.01 Reimbursable programs .....   | 5           | 5         | 5         |
| 10.00 Total new obligations .....   | 149         | 154       | 163       |
| <b>Budgetary resources available for obligation:</b>                                |             |           |           |
| 22.00 New budget authority (gross) .....  | 149         | 154       | 163       |
| 23.95 Total new obligations .....   | -149        | -154      | -163      |
| <b>New budget authority (gross), detail:</b>  |             |           |           |
| Discretionary:  |             |           |           |
| 40.00 Appropriation .....   | 144         | 149       | 158       |
| Spending authority from offsetting collections:                                     |             |           |           |
| 68.00 Offsetting collections (cash) .....   | 4           | 5         | 5         |
| 68.10 From Federal sources: Change in receivables and unpaid, unfilled orders ..... | 1           |           |           |
| 68.90 Spending authority from offsetting collections (total discretionary) .....    | 5           | 5         | 5         |
| 70.00 Total new budget authority (gross) .....                                      | 149         | 154       | 163       |

|   |      |      |      |
|---|------|------|------|
| <b>Change in unpaid obligations:</b>                                      |      |      |      |
| Unpaid obligations, start of year:  |      |      |      |
| 72.40 Obligated balance, start of year .....                              | 19   | 24   | 17   |
| 72.95 From Federal sources: Receivables and unpaid, unfilled orders ..... |      | 1    | 1    |
| 72.99 Total unpaid obligations, start of year .....                       | 19   | 25   | 18   |
| 73.10 Total new obligations .....   | 149  | 154  | 163  |
| 73.20 Total outlays (gross) .....   | -142 | -162 | -162 |
| 73.40 Adjustments in expired accounts (net) .....                         | -1   |      |      |
| Unpaid obligations, end of year:  |      |      |      |
| 74.40 Obligated balance, end of year .....                                | 24   | 17   | 18   |
| 74.95 From Federal sources: Receivables and unpaid, unfilled orders ..... | 1    | 1    | 1    |
| 74.99 Total unpaid obligations, end of year .....                         | 25   | 18   | 19   |

|  |     |     |     |
|--|-----|-----|-----|
| <b>Outlays (gross), detail:</b>                      |     |     |     |
| 86.90 Outlays from new discretionary authority ..... | 129 | 138 | 146 |
| 86.93 Outlays from discretionary balances .....      | 13  | 24  | 16  |
| 87.00 Total outlays (gross) .....                    | 142 | 162 | 162 |

|   |    |    |    |
|---|----|----|----|
| <b>Offsets:</b>   |    |    |    |
| Against gross budget authority and outlays:   |    |    |    |
| 88.00 Offsetting collections (cash) from: Federal sources .....                     | -4 | -5 | -5 |
| Against gross budget authority only:  |    |    |    |
| 88.95 From Federal sources: Change in receivables and unpaid, unfilled orders ..... | -1 |    |    |

|  |     |     |     |
|--|-----|-----|-----|
| <b>Net budget authority and outlays:</b> |     |     |     |
| 89.00 Budget authority .....             | 144 | 149 | 158 |
| 90.00 Outlays .....                      | 138 | 157 | 157 |

This account provides funds to administer and manage NSF programs. NSF continually devises and refines performance measures for development and monitoring of programs.

Salaries and expenses is included in the 21st Century research fund.

**Object Classification (in millions of dollars)**

| Identification code 49-0180-0-1-251                                 | 1999 actual | 2000 est. | 2001 est. |
|---|-------------|-----------|-----------|
| <b>Direct obligations:</b>  |             |           |           |
| Personnel compensation:   |             |           |           |
| 11.1 Full-time permanent .....                                      | 69          | 72        | 77        |
| 11.3 Other than full-time permanent .....                           | 11          | 12        | 13        |
| 11.5 Other personnel compensation .....                             | 2           | 2         | 2         |
| 11.8 Special personal services payments .....                       | 1           | 1         | 1         |
| 11.9 Total personnel compensation .....                             | 83          | 87        | 93        |
| 12.1 Civilian personnel benefits .....                              | 16          | 17        | 18        |
| 21.0 Travel and transportation of persons .....                     | 4           | 4         | 1         |
| 23.1 Rental payments to GSA .....                                   | 16          | 17        | 18        |
| 23.3 Communications, utilities, and miscellaneous charges .....     | 4           | 3         | 4         |
| 25.1 Advisory and assistance services .....                         | 1           | 1         | 1         |
| 25.2 Other services .....   | 4           | 4         | 4         |
| 25.3 Purchases of goods and services from Government accounts ..... | 1           | 1         | 1         |
| 25.7 Operation and maintenance of equipment .....                   | 5           | 5         | 6         |
| 26.0 Supplies and materials .....                                   | 2           | 2         | 2         |
| 31.0 Equipment .....  | 8           | 8         | 10        |
| 99.0 Subtotal, direct obligations .....                             | 144         | 149       | 158       |
| 99.0 Reimbursable obligations .....                                 | 4           | 5         | 5         |
| 99.5 Below reporting threshold .....                                | 1           |           |           |
| 99.9 Total new obligations .....                                    | 149         | 154       | 163       |

**Personnel Summary**

| Identification code 49-0180-0-1-251                                     | 1999 actual | 2000 est. | 2001 est. |
|---|-------------|-----------|-----------|
| 1001 Total compensable workyears: Full-time equivalent employment ..... | 1,142       | 1,150     | 1,150     |

**OFFICE OF INSPECTOR GENERAL**

For necessary expenses of the Office of Inspector General as authorized by the Inspector General Act of 1978, as amended, **[\$5,450,000] \$6,280,000, to remain available until September 30, [2001] 2002.**

**General and special funds—Continued**

**OFFICE OF INSPECTOR GENERAL—Continued**

(Departments of Veterans Affairs and Housing and Urban Development, and Independent Agencies Appropriations Act, 2000.)

**Program and Financing (in millions of dollars)**

| Identification code 49-0300-0-1-251   | 1999 actual | 2000 est. | 2001 est. |
|---|-------------|-----------|-----------|
| <b>Obligations by program activity:</b>   |             |           |           |
| 10.00 Total new obligations .....   | 5           | 5         | 6         |
| <b>Budgetary resources available for obligation:</b>                            |             |           |           |
| 22.00 New budget authority (gross) .....  | 5           | 5         | 6         |
| 23.95 Total new obligations .....   | -5          | -5        | -6        |
| <b>New budget authority (gross), detail:</b>                                    |             |           |           |
| Discretionary:  |             |           |           |
| 40.00 Appropriation .....   | 5           | 5         | 6         |
| <b>Change in unpaid obligations:</b>  |             |           |           |
| 72.40 Unpaid obligations, start of year: Obligated balance, start of year ..... | 1           | 2         | 1         |
| 73.10 Total new obligations .....   | 5           | 5         | 6         |
| 73.20 Total outlays (gross) .....   | -5          | -6        | -6        |
| 74.40 Unpaid obligations, end of year: Obligated balance, end of year .....     | 2           | 1         | 1         |
| <b>Outlays (gross), detail:</b>   |             |           |           |
| 86.90 Outlays from new discretionary authority .....                            | 4           | 4         | 5         |
| 86.93 Outlays from discretionary balances .....                                 | 1           | 1         | 1         |
| 87.00 Total outlays (gross) .....   | 5           | 6         | 6         |
| <b>Net budget authority and outlays:</b>  |             |           |           |
| 89.00 Budget authority .....  | 5           | 5         | 6         |
| 90.00 Outlays .....   | 5           | 6         | 6         |

This appropriation provides agency-wide audit and investigative functions to identify and correct management and administrative deficiencies which create conditions for existing or potential instances of fraud, waste, and mismanagement consistent with the Inspector General Act of 1978, as amended (5 U.S.C. App. 3).

The Office of Inspector General is included in the 21st Century research fund.

**Object Classification (in millions of dollars)**

| Identification code 49-0300-0-1-251                    | 1999 actual | 2000 est. | 2001 est. |
|--|-------------|-----------|-----------|
| 11.1 Personnel compensation: Full-time permanent ..... | 3           | 3         | 4         |
| 12.1 Civilian personnel benefits .....                 | 1           | 1         | 1         |
| 25.1 Advisory and assistance services .....            | 1           | 1         | 1         |
| 99.9 Total new obligations .....                       | 5           | 5         | 6         |

**Personnel Summary**

| Identification code 49-0300-0-1-251                                     | 1999 actual | 2000 est. | 2001 est. |
|---|-------------|-----------|-----------|
| 1001 Total compensable workyears: Full-time equivalent employment ..... | 44          | 46        | 50        |

**EDUCATION AND HUMAN RESOURCES**

For necessary expenses in carrying out science and engineering education and human resources programs and activities pursuant to the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-1875), including services as authorized by 5 U.S.C. 3109, [award-related travel,] authorized travel, and rental of conference rooms in the District of Columbia, [\$696,600,000] \$729,010,000, to remain available until September 30, [2001] 2002: Provided, That to the extent that the amount of this appropriation is less than the total amount authorized to be appropriated for included program activities, all amounts, including floors and ceilings, specified in the authorizing Act for those program activities or their subactivities shall be reduced proportionally[: Provided further, That \$10,000,000

shall be available for the purpose of establishing an office of innovation partnerships]. (Departments of Veterans Affairs and Housing and Urban Development, and Independent Agencies Appropriations Act, 2000.)

**Program and Financing (in millions of dollars)**

| Identification code 49-0106-0-1-251   | 1999 actual | 2000 est. | 2001 est. |
|---|-------------|-----------|-----------|
| <b>Obligations by program activity:</b>   |             |           |           |
| Obligations by program activity:  |             |           |           |
| Direct program:   |             |           |           |
| Appropriated activities:  |             |           |           |
| 00.01 Educational system reform .....   | 116         | 114       | 110       |
| 00.02 Office of innovation partnerships .....   | 49          | 60        | 48        |
| 00.03 Elementary, secondary and informal education .....                                  | 194         | 184       | 191       |
| 00.04 Undergraduate education .....   | 101         | 116       | 141       |
| 00.05 Graduate education .....  | 74          | 78        | 89        |
| 00.06 Human resource development .....  | 73          | 77        | 82        |
| 00.07 Research, evaluation and communication .....  | 55          | 62        | 68        |
| 00.91 Subtotal appropriated activities .....  | 662         | 691       | 729       |
| H-1B non-immigrant petitioner fee activities:   |             |           |           |
| 01.01 Scholarships for individuals (low-income students) .....                            | 1           | 45        | 23        |
| 01.02 Grants for enrichment courses .....   |             | 7         | 4         |
| 01.03 Systemic reform activities .....  |             | 7         | 4         |
| 01.91 Subtotal H-1B non-immigrant petitioner fee activities .....                         | 1           | 59        | 31        |
| 02.00 Total direct obligations .....  | 663         | 750       | 760       |
| 09.01 Reimbursable programs .....   | 14          | 15        | 15        |
| 10.00 Total new obligations .....   | 677         | 765       | 775       |
| <b>Budgetary resources available for obligation:</b>                                      |             |           |           |
| 21.40 Unobligated balance available, start of year .....                                  |             | 26        |           |
| 22.00 New budget authority (gross) .....  | 703         | 739       | 775       |
| 23.90 Total budgetary resources available for obligation .....                            | 703         | 765       | 775       |
| 23.95 Total new obligations .....   | -677        | -765      | -775      |
| 24.40 Unobligated balance available, end of year .....                                    | 26          |           |           |
| <b>New budget authority (gross), detail:</b>  |             |           |           |
| Discretionary:  |             |           |           |
| 40.00 Appropriation .....   | 662         | 697       | 729       |
| 40.76 Reduction pursuant to P.L. 106-113 .....  |             | -6        |           |
| 43.00 Appropriation (total discretionary) .....   | 662         | 691       | 729       |
| Mandatory:  |             |           |           |
| 60.25 Appropriation (special fund, indefinite) .....                                      | 27          | 33        | 31        |
| Discretionary:  |             |           |           |
| 68.00 Spending authority from offsetting collections: Offsetting collections (cash) ..... | 14          | 15        | 15        |
| 70.00 Total new budget authority (gross) .....  | 703         | 739       | 775       |
| <b>Change in unpaid obligations:</b>  |             |           |           |
| 72.40 Unpaid obligations, start of year: Obligated balance, start of year .....           | 860         | 941       | 996       |
| 73.10 Total new obligations .....   | 677         | 765       | 775       |
| 73.20 Total outlays (gross) .....   | -585        | -710      | -724      |
| 73.40 Adjustments in expired accounts (net) .....   | -10         |           |           |
| 74.40 Unpaid obligations, end of year: Obligated balance, end of year .....               | 941         | 996       | 1,047     |
| <b>Outlays (gross), detail:</b>   |             |           |           |
| 86.90 Outlays from new discretionary authority .....                                      | 91          | 105       | 110       |
| 86.93 Outlays from discretionary balances .....   | 494         | 545       | 584       |
| 86.97 Outlays from new mandatory authority .....  |             | 33        | 31        |
| 86.98 Outlays from mandatory balances .....   |             | 27        |           |
| 87.00 Total outlays (gross) .....   | 585         | 710       | 724       |
| <b>Offsets:</b>   |             |           |           |
| Against gross budget authority and outlays:   |             |           |           |
| 88.00 Offsetting collections (cash) from: Federal sources .....                           | -14         | -15       | -15       |
| <b>Net budget authority and outlays:</b>  |             |           |           |
| 89.00 Budget authority .....  | 689         | 724       | 760       |
| 90.00 Outlays .....   | 571         | 695       | 709       |

Summary of Budget Authority and Outlays

| (in millions of dollars) |             |           |           |
|--------------------------|-------------|-----------|-----------|
| Enacted/requested:       | 1999 actual | 2000 est. | 2001 est. |
| Budget Authority .....   | 689         | 724       | 760       |
| Outlays .....            | 571         | 695       | 710       |
| Supplemental proposal:   |             |           |           |
| Budget Authority .....   |             | 1         |           |
| Outlays .....            |             |           |           |
| Total:                   |             |           |           |
| Budget Authority .....   | 689         | 725       | 760       |
| Outlays .....            | 571         | 695       | 710       |

Education and human resources (EHR) activities provide a comprehensive set of programs that further NSF's goal of ensuring a diverse, internationally competitive and globally-engaged workforce of scientists, engineers and well-prepared citizens. At the pre-kindergarten through grade 12 (pre K-12) level, EHR catalyzes systemic reform of science, mathematics, engineering and technology (SMET) education in States, cities, school districts, and rural areas. Its pre K-12 programs provide new instructional materials and pedagogical techniques that incorporate the latest advances in teaching, learning, and educational technologies. They also provide enrichment activities for teachers and students. Undergraduate initiatives improve curricula in all SMET fields and lead reform efforts in mathematics, chemistry, and other disciplines. EHR programs strengthen laboratory course offerings and enhance faculty. Programs for advanced technological education strengthen education for students preparing to enter the high-technology workforce. Graduate level support is directed primarily to research and education fellowships and traineeships to guarantee the U.S. world leadership in science and technology. All EHR programming focuses on broadening participation of groups underrepresented in SMET fields including activities focused on the improvement of infrastructure and academic programs at minority-serving institutions. The Office of Innovation Partnerships was initiated in FY 2000 to examine means of helping institutions expand their research capacity and competitiveness so as to develop a truly national scientific research community. Included is the Experimental program to stimulate competitive research (EPSCoR) that broadens participation of States and regions in science and engineering. EHR supports research that advances SMET education, as well as development and effective implementation of learning technologies. Evaluation and communications activities ensure accountability by developing indicators that measure program impact and inform the education community of best practices and relevant information. Also included within EHR are funds resulting from the collection and use of H-1B non-immigrant fees, for scholarships, enrichment courses, and systemic reform activities. This appropriation also supports NSF's active development of performance indicators.

Education and human resources programs are included in the 21st Century research fund.

Object Classification (in millions of dollars)

| Identification code 49-0106-0-1-251 |  |           |           |     |
|-------------------------------------|--|-----------|-----------|-----|
|                                     | 1999 actual                                | 2000 est. | 2001 est. |     |
| Direct obligations:                 |  |           |           |     |
| 21.0                                | Travel and transportation of persons ..... | 2         | 2         | 3   |
| 25.1                                | Advisory and assistance services .....     | 18        | 19        | 21  |
| 41.0                                | Grants, subsidies, and contributions ..... | 642       | 729       | 736 |
| 99.0                                | Subtotal, direct obligations .....         | 662       | 750       | 760 |
| 99.0                                | Reimbursable obligations .....             | 14        | 15        | 15  |
| 99.5                                | Below reporting threshold .....            | 1         |           |     |
| 99.9                                | Total new obligations .....                | 677       | 765       | 775 |

Trust Funds

DONATIONS

Unavailable Collections (in millions of dollars)

| Identification code 49-8960-0-7-251 |  |           |           |     |
|-------------------------------------|--|-----------|-----------|-----|
|                                     | 1999 actual  | 2000 est. | 2001 est. |     |
| Balance, start of year:             |  |           |           |     |
| 01.99                               | Balance, start of year .....                       |           | 3         |     |
| Receipts:                           |  |           |           |     |
| 02.01                               | Donations to the National Science Foundation ..... | 37        | 45        | 37  |
| 04.00                               | Total: Balances and collections .....              | 37        | 45        | 40  |
| Appropriation:                      |  |           |           |     |
| 05.01                               | Donations .....                                    | -37       | -42       | -35 |
| 07.99                               | Total balance, end of year .....                   |           | 3         | 5   |

Program and Financing (in millions of dollars)

| Identification code 49-8960-0-7-251           |   |           |           |     |
|---|---|-----------|-----------|-----|
|   | 1999 actual   | 2000 est. | 2001 est. |     |
| Obligations by program activity:              |   |           |           |     |
| 00.01   | Ocean drilling programs .....   | 18        | 20        | 20  |
| 00.02   | Gemini telescope .....  | 13        | 20        | 13  |
| 00.03   | Other .....   | 2         | 2         | 2   |
| 10.00   | Total new obligations .....   | 33        | 42        | 35  |
| Budgetary resources available for obligation: |   |           |           |     |
| 21.40   | Unobligated balance available, start of year .....                        | 10        | 14        | 14  |
| 22.00   | New budget authority (gross) .....  | 37        | 42        | 35  |
| 23.90   | Total budgetary resources available for obligation .....                  | 47        | 56        | 49  |
| 23.95   | Total new obligations .....   | -33       | -42       | -35 |
| 24.40   | Unobligated balance available, end of year .....                          | 14        | 14        | 14  |
| New budget authority (gross), detail:         |   |           |           |     |
| Mandatory:                                    |   |           |           |     |
| 60.27   | Appropriation (trust fund, indefinite) .....                              | 37        | 42        | 35  |
| Change in unpaid obligations:                 |   |           |           |     |
| 72.40   | Unpaid obligations, start of year: Obligated balance, start of year ..... | 22        | 13        | 13  |
| 73.10   | Total new obligations .....   | 33        | 42        | 35  |
| 73.20   | Total outlays (gross) .....   | -42       | -42       | -35 |
| 74.40   | Unpaid obligations, end of year: Obligated balance, end of year .....     | 13        | 13        | 13  |
| Outlays (gross), detail:                      |   |           |           |     |
| 86.97   | Outlays from new mandatory authority .....                                | 31        | 42        | 35  |
| 86.98   | Outlays from mandatory balances .....                                     | 11        |           |     |
| 87.00   | Total outlays (gross) .....   | 42        | 42        | 35  |
| Net budget authority and outlays:             |   |           |           |     |
| 89.00   | Budget authority .....  | 37        | 42        | 35  |
| 90.00   | Outlays .....   | 42        | 42        | 35  |

This account consists of contributions from foreign governments, organizations and individuals to fund various cooperative efforts in science, research and education. These efforts include major international projects, such as operation and construction of the GEMINI telescope, and the NSF Ocean drilling program. Other smaller activities supported include cooperative research, joint seminars, exchange of senior scientists, short-term research development visits, international conferences, and support for certain special functions of NSF and the National Science Board. These funds are not otherwise available.

Object Classification (in millions of dollars)

| Identification code 49-8960-0-7-251 |   |           |           |    |
|-------------------------------------|---|-----------|-----------|----|
|                                     | 1999 actual                                   | 2000 est. | 2001 est. |    |
| 25.4                                | Operation and maintenance of facilities ..... | 16        | 20        | 20 |
| 41.0                                | Grants, subsidies, and contributions .....    | 17        | 22        | 15 |
| 99.9                                | Total new obligations .....                   | 33        | 42        | 35 |