

HR 4664

National Science Foundation Authorization Act of 2002

Congress: 107 (2001–2003, Ended)

Chamber: House

Policy Area: Science, Technology, Communications

Introduced: May 7, 2002

Current Status: Became Public Law No: 107-368.

Latest Action: Became Public Law No: 107-368. (Dec 19, 2002)

Law: 107-368 (Enacted Dec 19, 2002)

Official Text: <https://www.congress.gov/bill/107th-congress/house-bill/4664>

Sponsor

Name: Rep. Smith, Nick [R-MI-7]

Party: Republican • **State:** MI • **Chamber:** House

Cosponsors (26 total)

Cosponsor	Party / State	Role	Date Joined
Rep. Baca, Joe [D-CA-42]	D · CA		May 7, 2002
Rep. Baird, Brian [D-WA-3]	D · WA		May 7, 2002
Rep. Barcia, James A. [D-MI-5]	D · MI		May 7, 2002
Rep. Biggert, Judy [R-IL-13]	R · IL		May 7, 2002
Rep. Boehlert, Sherwood [R-NY-23]	R · NY		May 7, 2002
Rep. Calvert, Ken [R-CA-43]	R · CA		May 7, 2002
Rep. Ehlers, Vernon J. [R-MI-3]	R · MI		May 7, 2002
Rep. Etheridge, Bob [D-NC-2]	D · NC		May 7, 2002
Rep. Gilchrest, Wayne T. [R-MD-1]	R · MD		May 7, 2002
Rep. Hall, Ralph M. [D-TX-4]	D · TX		May 7, 2002
Rep. Honda, Michael M. [D-CA-15]	D · CA		May 7, 2002
Rep. Johnson, Eddie Bernice [D-TX-30]	D · TX		May 7, 2002
Rep. Lofgren, Zoe [D-CA-16]	D · CA		May 7, 2002
Rep. Morella, Constance A. [R-MD-8]	R · MD		May 7, 2002
Rep. Nethercutt, George R., Jr. [R-WA-5]	R · WA		May 7, 2002
Rep. Smith, Lamar [R-TX-21]	R · TX		May 7, 2002
Rep. Udall, Mark [D-CO-2]	D · CO		May 7, 2002
Rep. Forbes, J. Randy [R-VA-4]	R · VA		May 15, 2002
Rep. Grucci, Felix J., Jr. [R-NY-1]	R · NY		May 15, 2002
Rep. Hart, Melissa A. [R-PA-4]	R · PA		May 15, 2002
Rep. Rivers, Lynn N. [D-MI-13]	D · MI		May 21, 2002
Rep. Johnson, Timothy V. [R-IL-15]	R · IL		May 22, 2002
Rep. Woolsey, Lynn C. [D-CA-6]	D · CA		May 22, 2002
Rep. Gutknecht, Gil [R-MN-1]	R · MN		Jun 4, 2002
Rep. Larson, John B. [D-CT-1]	D · CT		Jun 4, 2002
Rep. Moore, Dennis [D-KS-3]	D · KS		Jun 4, 2002

Committee Activity

Committee	Chamber	Activity	Date
Health, Education, Labor, and Pensions Committee	Senate	Discharged From	Nov 15, 2002
Science, Space, and Technology Committee	House	Reported by	May 9, 2002

Subjects & Policy Tags

Policy Area:

Science, Technology, Communications

Related Bills

Bill	Relationship	Last Action
107 HR 5714	Related bill	Nov 25, 2002: Referred to the Subcommittee on Research.
107 S 2817	Related bill	Oct 16, 2002: Placed on Senate Legislative Calendar under General Orders. Calendar No. 734.
107 HR 3130	Related bill	Jul 11, 2002: Received in the Senate and Read twice and referred to the Committee on Health, Education, Labor, and Pensions.
107 HRES 432	Procedurally related	Jun 5, 2002: Motion to reconsider laid on the table Agreed to without objection.
107 HR 2051	Related bill	May 15, 2002: Received in the Senate and Read twice and referred to the Committee on Health, Education, Labor, and Pensions.
107 S 1549	Related bill	Oct 15, 2001: Read twice and referred to the Committee on Health, Education, Labor, and Pensions.
107 HR 100	Related bill	Jul 31, 2001: Received in the Senate and Read twice and referred to the Committee on Health, Education, Labor, and Pensions.
107 HR 1858	Related bill	Jul 31, 2001: Received in the Senate and Read twice and referred to the Committee on Health, Education, Labor, and Pensions.
107 S 1262	Related bill	Jul 27, 2001: Read twice and referred to the Committee on Health, Education, Labor, and Pensions.
107 HR 1693	Related bill	Jul 20, 2001: Referred to the Subcommittee on 21st Century Competitiveness.
107 HR 1472	Related bill	May 8, 2001: Sponsor introductory remarks on measure. (CR H1939-1940)

National Science Foundation Authorization Act of 2002 - (Sec. 3) Specifies goals under National Science Foundation (NSF) policy objectives of: (1) strengthening the Nation's lead in science and technology; (2) increasing overall workforce skills; and (3) strengthening innovation.

(Sec. 5) Authorizes appropriations to NSF, increasing each year, for FY 2003 through 2005, with specified allocations for: (1) research and related activities; (2) education and human resources; (3) major research equipment and facilities construction; (4) salaries and expenses; (5) the Office of the National Science Board (Board); and (6) the Office of Inspector General. Authorizes appropriations to NSF for FY 2006 and 2007, without specific allocations, if Congress determines that NSF has made successful progress in meeting management goals.

(Sec. 6) Prohibits the obligation of major research equipment and facilities construction funds until 30 days after the NSF Director submits an annual report (required under this Act) containing a list of the most recent Board-approved projects.

(Sec. 7) Requires the Director to submit to specified congressional committees an annual plan for the allocation of funds for the corresponding fiscal year.

(Sec. 8) Requires the Director to carry out the following initiatives: (1) an information technology research program in areas related to cybersecurity, terascale computing systems, software, networking, scalability, communications, data management, and remote sensing and geospatial information technologies; (2) a nanoscale science and engineering research and education program; (3) a plant genome research program, including regional plant genome and gene expression research centers and basic genome research partnerships; (4) a science and technology innovation partnerships program; (5) a mathematics and science education partnerships program; (6) a Robert Noyce Scholarship Program; (7) a multi-year, competitive grant program to increase the number of associate's or bachelor's degree students in science, mathematics, engineering, and technology; (8) a competitive grant program for State or local educational agencies that supports the planning and implementation of agency-wide secondary school reform initiatives designed to promote scientific and technological literacy; (9) the Experimental Program to Stimulate Competitive Research; (10) a comprehensive program to advance the goals of the Science and Engineering Equal Opportunities Act; and (11) an astronomical research program.

(Sec. 9) Requires the Director to award grants to institutions of higher education or eligible nonprofit organizations to establish mathematics and science education partnership programs to improve elementary and secondary mathematics and science instruction. Requires such programs to include activities that: (1) emphasize the training of master teachers for improving the instruction of mathematics or science; (2) encourage the interest of girls in science, mathematics, engineering, and technology; and (3) support research projects performed by students at secondary schools. Requires the Director to give priority to applications which include a high-need local educational agency and to ensure that a substantial number of partnerships funded include businesses. Requires: (1) program evaluation and dissemination of results; (2) annual reports on program coordination with provisions of the Elementary and Secondary Education Act of 1965; and (3) appropriate technical assistance to meet program requirements.

(Sec. 10) Requires the Director to award grants to institutions of higher education to provide scholarships, stipends, and programming designed to recruit and train mathematics and science teachers (to be known as the Robert Noyce Scholarship Program). Requires each individual receiving a scholarship or stipend under the program to complete, within six years of graduation, two years of service as a mathematics or science teacher for each year the scholarship was received. Requires repayment for unserved periods or failure to graduate. Allows the Director to waive a service or repayment obligation whenever compliance is impossible or would involve extreme hardship or if enforcement would be

unconscionable.

(Sec. 11) Requires the Director to award grants to institutions of higher education to establish multidisciplinary Centers for Research on Learning and Education Improvement, which shall conduct and evaluate research in cognitive science, education, and related fields and develop ways in which research results can be applied in elementary and secondary school classrooms to improve the teaching of mathematics and science. Requires the Director to convene an annual meeting of such Centers to foster collaboration and disseminate research results.

(Sec. 12) Requires the Director to: (1) determine whether any existing NSF programs duplicate programs authorized under this Act; (2) terminate or merge any existing duplicative program; and (3) not establish any new duplicative program. Requires the Director of the Office of Science and Technology Policy to review NSF education programs to ensure compliance with such requirements and to report review results to specified congressional committees.

(Sec. 13) Requires the Director to: (1) assess and report to specified congressional committees on the major research instrumentation program; (2) enter into an arrangement with the National Academy of Sciences (NAS) to assess the need for an interagency program to establish and support university-based centers for interdisciplinary research and advanced instrumentation development; and (3) submit the NAS assessment results to specified congressional committees.

(Sec. 14) Requires the Director to: (1) develop, submit to the Board for approval, and report to specified congressional committees on a list indicating the relative priority for funding under the major research equipment and facilities construction account of each project the Board has approved for inclusion in a future budget request; and (2) include in the NSF annual budget request a plan for the proposed construction of, and repair and upgrades to, national research facilities, including full life-cycle cost information. Prohibits the management of any national research facility project by an NSF temporary appointee. Requires the Board to: (1) explicitly approve any project before funds may be obligated; and (2) report to specified congressional committees on any delegation of authority related to funding for any project. Requires the Director to: (1) arrange through NAS a study on setting priorities for a diverse array of disciplinary and interdisciplinary NSF-sponsored large research facility projects; and (2) submit study results to specified congressional committees.

(Sec. 15) Requires the Board to conduct open business meetings. Requires the NSF's Inspector General to: (1) conduct annual audits of Board compliance with open meeting requirements; and (2) report audit results to specified congressional committees.

Authorizes NSF to designate persons authorized to have access to identifiable information for statistical and research purposes only. Subjects violators of NSF confidentiality provisions to a \$10,000 fine and five years' imprisonment.

(Sec. 17) Requires the Director to award grants to institutions of higher education to expand previously implemented reforms of undergraduate science, mathematics, engineering, or technology education that have been demonstrated to increase the number and quality of students studying toward and completing associate's or baccalaureate degrees in such fields.

(Sec. 18) Requires the Director to transmit to specified congressional committees a report describing the impact that increasing the average grant size and duration would have on minority-serving institutions and on institutions located in States where NSF's Experimental Program to Stimulate Competitive Research is carrying out activities.

Requires the Director to: (1) arrange with NAS to assess gender differences in the careers of science and engineering faculty and to transmit results to specified congressional committees; (2) enter into an arrangement with an appropriate

party to assess gender differences in the distribution of external Federal research and development funding and to transmit assessment results to specified congressional committees; (3) study and report to specified congressional committees on issues related to broadband network access for schools and libraries; and (4) report annually to specified congressional committees on the amount of NSF funding to minority-serving institutions and recommendations for the improvement of such funding.

(Sec. 19) Requires the Director to: (1) evaluate the effectiveness of all undergraduate science, mathematics, engineering, and technology education activities supported by NSF in increasing the number and quality of students studying toward and completing degrees in such fields; (2) establish a common set of assessment benchmarks and tools for use in NSF project-based assessment activities; (3) report every three years to specified congressional committees the results of such evaluation; and (4) annually evaluate a random sample of grants, contracts, or other awards made pursuant to this Act and provide for disseminating the results to the public.

(Sec. 20) Instructs the Committee on Equal Opportunities in Science and Engineering to include as part of the first biennial report on its activities transmitted to Congress after the date of enactment of this Act: (1) a summary of its findings over the previous ten years; (2) a description of past and present NSF policies and activities to encourage the full participation of women, minorities, and persons with disabilities in science, mathematics, and engineering fields; and (3) an assessment of trends of participation and of the success of NSF policies and activities, along with proposals for new strategies or the broadening of existing successful strategies toward facilitating the goals of the Science and Engineering Equal Opportunities Act.

(Sec. 21) Amends the Scientific and Advanced-Technology Act of 1992 to: (1) include core science and mathematics research within the National Advanced Scientific and Technical Education Program; and (2) require articulation partnerships to include providing students with research experiences at bachelor degree granting institutions participating in such partnerships.

Requires a report from the Director to specified congressional committees on results of NSF efforts conducted under such Act.

(Sec. 22) Requires a report from the Board to specified congressional committees addressing and examining NSF budgetary and programmatic growth as provided by this Act.

(Sec. 23) Directs NSF and the National Aeronautics and Space Administration (NASA) to jointly establish an Astronomy and Astrophysics Advisory Committee for assessing and making recommendations regarding the coordination of astronomy and astrophysics programs of NSF and NASA.

(Sec. 24) Authorizes the Director to establish a new program to award grants to Hispanic-serving institutions, Alaska Native-serving institutions, Native Hawaiian-serving institutions, and other institutions serving a substantial number of minority students to enhance the quality of undergraduate science, mathematics, and engineering education at such institutions and to increase the retention and graduation rates of students pursuing associate's or baccalaureate degrees in science, mathematics, engineering, or technology.

(Sec. 25) Requires the Director to enter into an agreement with NAS to conduct a comprehensive study to determine the source of discrepancies in Federal reports on obligations and actual expenditures of Federal research and development spending. Requires the Director to submit study results to specified congressional committees.

(Sec. 26) Authorizes the Director to accept planning proposals from applicants who are within .075 percentage points of the current eligibility level for the Experimental Program to Stimulate Competitive Research.

Actions Timeline

- **Dec 19, 2002:** Signed by President.
- **Dec 19, 2002:** Signed by President.
- **Dec 19, 2002:** Became Public Law No: 107-368.
- **Dec 19, 2002:** Became Public Law No: 107-368.
- **Dec 9, 2002:** Presented to President.
- **Dec 9, 2002:** Presented to President.
- **Nov 15, 2002:** Message on Senate action sent to the House.
- **Nov 15, 2002:** Mr. Armey asked unanimous consent that the House agree to the Senate amendments.
- **Nov 15, 2002:** Resolving differences -- House actions: On motion that the House agree to the Senate amendments Agreed to without objection.(consideration: CR 11/14/2002 H9009-9018; text as House agreed to Senate amendments: CR 11/14/2002 H9009-9018)
- **Nov 15, 2002:** On motion that the House agree to the Senate amendments Agreed to without objection. (consideration: CR 11/14/2002 H9009-9018; text as House agreed to Senate amendments: CR 11/14/2002 H9009-9018)
- **Nov 15, 2002:** Motion to reconsider laid on the table Agreed to without objection.
- **Nov 14, 2002:** Senate Committee on Health, Education, Labor, and Pensions discharged by Unanimous Consent.
- **Nov 14, 2002:** Senate Committee on Health, Education, Labor, and Pensions discharged by Unanimous Consent.
- **Nov 14, 2002:** Measure laid before Senate by unanimous consent. (consideration: CR S11155-11159)
- **Nov 14, 2002:** Passed/agreed to in Senate: Passed Senate with an amendment and an amendment to the Title by Unanimous Consent.
- **Nov 14, 2002:** Passed Senate with an amendment and an amendment to the Title by Unanimous Consent.
- **Jun 6, 2002:** Received in the Senate and Read twice and referred to the Committee on Health, Education, Labor, and Pensions.
- **Jun 5, 2002:** Rule H. Res. 432 passed House.
- **Jun 5, 2002:** Considered under the provisions of rule H. Res. 432. (consideration: CR H3185-3203; text of measure as reported in House: CR H3195-3196)
- **Jun 5, 2002:** Rule provides for consideration of H.R. 4664 with 1 hour of general debate. Previous question shall be considered as ordered without intervening motions except motion to recommit with or without instructions. All points of order against consideration of the bill are waived. It shall be in order to consider as an original bill for the purpose of amendment under the five-minute rule the amendment in the nature of a substitute recommended by the Committee on Science now printed in the bill. Measure will be read by section. Bill is open to amendments.
- **Jun 5, 2002:** House resolved itself into the Committee of the Whole House on the state of the Union pursuant to H. Res. 432 and Rule XXIII.
- **Jun 5, 2002:** The Speaker designated the Honorable Johnny Isakson to act as Chairman of the Committee.
- **Jun 5, 2002:** GENERAL DEBATE - The Committee of the Whole proceeded with one hour of general debate on H.R. 4664.
- **Jun 5, 2002:** DEBATE - The Committee of the Whole proceeded with debate on the Rivers amendment under the five-minute rule.
- **Jun 5, 2002:** DEBATE - The Committee of the Whole proceeded with debate on the Woolsey amendment under the five-minute rule.
- **Jun 5, 2002:** The House rose from the Committee of the Whole House on the state of the Union to report H.R. 4664.
- **Jun 5, 2002:** The previous question was ordered pursuant to the rule.
- **Jun 5, 2002:** The House adopted the amendment in the nature of a substitute as agreed to by the Committee of the Whole House on the state of the Union.
- **Jun 5, 2002:** Passed/agreed to in House: On passage Passed by recorded vote: 397 - 25 (Roll no. 212).
- **Jun 5, 2002:** On passage Passed by recorded vote: 397 - 25 (Roll no. 212).
- **Jun 5, 2002:** Motion to reconsider laid on the table Agreed to without objection.
- **Jun 4, 2002:** Reported (Amended) by the Committee on Science. H. Rept. 107-488.
- **Jun 4, 2002:** Reported (Amended) by the Committee on Science. H. Rept. 107-488.
- **Jun 4, 2002:** Placed on the Union Calendar, Calendar No. 291.
- **Jun 4, 2002:** Rules Committee Resolution H. Res. 432 Reported to House. Rule provides for consideration of H.R. 4664 with 1 hour of general debate. Previous question shall be considered as ordered without intervening motions except

motion to recommit with or without instructions. All points of order against consideration of the bill are waived. It shall be in order to consider as an original bill for the purpose of amendment under the five-minute rule the amendment in the nature of a substitute recommended by the Committee on Science now printed in the bill. Measure will be read by section. Bill is open to amendments.

- **May 22, 2002:** Committee Consideration and Mark-up Session Held.
- **May 22, 2002:** Ordered to be Reported (Amended) by Voice Vote.
- **May 9, 2002:** Subcommittee Hearings Held.
- **May 9, 2002:** Subcommittee Consideration and Mark-up Session Held.
- **May 9, 2002:** Forwarded by Subcommittee to Full Committee (Amended) by Voice Vote.
- **May 8, 2002:** Referred to the Subcommittee on Research.
- **May 7, 2002:** Introduced in House
- **May 7, 2002:** Introduced in House
- **May 7, 2002:** Referred to the House Committee on Science.