

**SECTION BY SECTION**  
**H.R. 4186, the FIRST ACT OF 2014**

**Sec. 1. Short Title; Table of Contents.**

This section establishes the short title of the bill as the “Frontiers in Innovation, Research, Science, and Technology Act of 2014” or the “FIRST Act of 2014.”

**Sec. 2. Definition.**

This section defines STEM and STEM education.

**TITLE I – NATIONAL SCIENCE FOUNDATION**

**Sec. 101. Authorization of Appropriations.**

This section authorizes \$7,171,918,000 for fiscal year 2014 for NSF, including \$5,808,918,000 for research and related activities, \$846,500,000 for education and human resources, \$200,000,000 for major research equipment and facilities construction, \$298,000,000 for agency operations and award management, \$4,300,000 for the Office of the National Science Board, and \$14,200,000 for the Office of the Inspector General.

This section authorizes \$7,279,496,770 for fiscal year 2015 for NSF, including \$5,900,496,770 for research and related activities, \$858,500,000 for education and human resources, \$203,000,000 for major research equipment and facilities construction, \$298,000,000 for agency operations and award management, \$4,300,000 for the Office of the National Science Board, and \$15,200,000 for the Office of the Inspector General.

**Sec. 102. Findings.**

This section contains findings regarding the importance of the research and education activities of the NSF.

**Sec. 103. Policy Objectives.**

Section 103 states that in allocating resources, NSF must have the objectives of: renewing and maintaining the Nation’s international leadership in science and technology through specified activities; increasing overall workforce skills; and strengthening innovation by expanding the focus of competitiveness and innovation policy at the regional and local level.

**Sec 104. Definitions.**

This section would provide relevant definitions within Title I.

**Sec 105. Accountability and Transparency.**

Section 105 states that it is the sense of Congress that: sustained, predictable Federal funding is essential to U.S. leadership in science and technology; understanding of and confidence in investments in basic research are essential to support for Federal funding; and NSF should commit itself to transparency and accountability as well as clear public communication regarding the national interest for every NSF-awarded grant and cooperative agreement.

**Sec. 106. Greater Accountability for Federal Funding in Research.**

Section 106 states that NSF shall award funding for basic research and education in the sciences through a new grant or cooperative agreement only if a determination is made and written justification is published by NSF affirming that such grant or agreement is worthy of Federal funding and is in the national interest, determined by meeting one or more specified criteria. A determination shall be made after a proposal has satisfied NSF's review for merit and broader impacts. This section does not alter NSF's intellectual merit or broader impacts criteria for evaluating applications. It requires the National Science Board to develop, and the Director to implement, a policy for carrying out these requirements that provides for educating NSF's staff and applicants on these policies. This section requires the National Science Board to transmit a report to Congress describing plans for implementing these requirements. Additionally, it requires an annual report to Congress by the Director, and a subsequent review of each annual report by the National Science Board.

**Sec. 107. Obligation of Major Research Equipment and Facilities Construction Funds.**

This section states that no funds may be obligated for new Major Research Equipment and Facilities Construction projects at NSF until 30 days after the report required under section 14 (a)(2) of the National Science Foundation Authorization Act of 2002 is transmitted to Congress.

**Sec. 108. Graduate Student Support.**

Section 108 amends the America COMPETES Reauthorization Act of 2010 to state that the Director may only increase funding for NSF's Graduate Research Fellowship program over the previous year's funding levels at the same rate as a corresponding increase for the Integrative Graduate Education and Research Traineeship program (language previously required the two programs to share increases and decreases). This section also specifies essential elements of the Graduate Education and Research Traineeship that must be maintained.

**Sec 109. Permissible Support.**

This section allows the Directorate for Education and Human Resources to support informal education grants for the participation of students in nonprofit competitions, out-of-school activities, and field experience related to STEM subjects and allows support to broaden secondary school students' access to and interest in careers that require academic preparation in STEM subjects.

**Sec. 110. Expanding STEM Opportunities.**

Section 110 states that within the Directorate for Education and Human Resources, under existing programs targeting broadening participation, the Director shall provide grants on a merit-review competitive basis for research on programming that engages underrepresented students in grades kindergarten through 8th in STEM in order to prepare these students to pursue STEM degrees or careers. This section states that grants awarded under this section shall be used toward research to advance engagement of underrepresented students in grades kindergarten through 8th in STEM through providing before-school, after-school, out-of-school, or summer activities, and specifies permitted activities under these grants. It describes the application requirements for such grants and states that in awarding grants under this section, the Director shall give priority to applicants that include or partner with a non-profit, nongovernmental organization that has experience and expertise in increasing the participation of underrepresented

students in STEM. Section 110 requires that each applicant who receives funds provide, at the conclusion of every year during which funds are received, an evaluation in a form prescribed by the Director. It also requires that no later than 3 years after the date of enactment, the Director shall evaluate the program established under this Act, and provide a report to Congress on the evaluation and make the report widely available. The Director is required to consult, cooperative, and coordinate with relevant Federal agencies to enhance program effectiveness and avoid duplication.

**Sec. 111. Prohibition.**

This section prohibits NSF from implementing any STEM education program and activity changes proposed in the Administration's FY14 budget proposal.

**Sec. 112. Review of Education Programs.**

This section requires the Director to review NSF's education programs to determine whether there is any duplication in these programs and how these programs are being evaluated and assessed for outcome-oriented effectiveness. The Director must complete a report and submit the report to Congress.

**Sec. 113. Recompensation of Awards.**

Section 113 includes findings related to the merit-review process and the value of requiring expiring awards to be recompeted. This section requires the Director to ensure that the system for recompensation of maintenance and operation of facilities is fair, consistent, and transparent and allows for renewal of grants and awards in a timely manner. It also requires that the Director periodically evaluate whether the criteria are being applied in a manner that is transparent, reliable, and valid.

**Sec. 114. Sense of the Congress Regarding Industry Investment in STEM Education.**

This section states that it is the sense of Congress that: in order to bolster the STEM workforce pipeline, many industry sectors are becoming involved in STEM at K-12, undergraduate, and graduate levels; partnerships with education providers, STEM focused competitions, and other opportunities are important pieces of private sector efforts to strengthen the STEM workforce; understanding the private sector's efforts in STEM will inform the Federal Government's role in STEM education; and NSF should support industry initiatives that support STEM education.

**Sec. 115. Misrepresentation of Research Results.**

Section 115 states that as a condition for receiving a grant from NSF, a principal investigator (PI) must certify that the findings and conclusions of any article authored by the PI using the results of research conducted under the grant will contain no falsification or fabrication and will be free of any plagiarism. The section requires the Inspector General of NSF to investigate suspected violations of this certification, and submit the results to the Director, with a recommendation of whether a violation has occurred. The Director shall subsequently make a determination of whether the PI knowingly violated a certification signed pursuant to this section. If the Director determines that a PI knowingly violated a certification, NSF shall not, for a period of five to 10 years, as determined by the Director, provide a research grant or extension to such a PI, except pursuant to appeal. The Director must notify a PI of such a determination not later than seven days after the determination is made. The Director must establish a process by which a PI may

appeal a determination of the ban. This section contains guidelines for making a violation of the certification publicly available.

**Sec. 116. Citations Supporting Research Grant Applications.**

This section states that a peer-reviewed grant proposal application to NSF may not include more than five citations to articles published by the PI, within the section supporting the credentials of the PI, submitting the proposal. NSF may not consider more than five citations to such articles in determining whether to award the grant.

**Sec. 117. Research Grant Conditions.**

Section 117 requires NSF to establish procedures to ensure that: a research grant awarded by NSF to a PI does not duplicate the aims and scope of any grant award to the PI by another agency; a PI includes in a grant application to the NSF a list of all Federal funding received by the PI and any outstanding funding requests; unpublished results used to support a proposal made to NSF do not contain knowing misrepresentations of data; PIs who have received more than five years of NSF funding at any point in their careers (with specified exceptions) are only awarded additional grants by NSF if the grant contributes original, creative and transformative research; and PIs who receive NSF grant funding under more than one grant at the same time have sufficient resources to conduct the proposed research under each of those grants appropriately under the terms of the grant.

**Sec. 118. Computing Resources Study.**

This section requires the Comptroller General to transmit to Congress a report on the results of a study on the use of computing resources funded by NSF at institutions of higher education.

**Sec. 119. Scientific Breakthrough Prizes.**

This section requires the Director of NSF to place a high priority on designing and administering pilot programs for scientific breakthrough prizes that are in conjunction with Office of Science and Technology Policy guidelines.

**Sec. 120. Rotating Personnel.**

Section 120 requires the Director to ensure that the cost of employing individuals who are not permanent NSF employees does not exceed 110% the cost of employing permanent NSF employees to perform the same functions.

**Sec. 121. Report of the NSB Task Force on Administrative Burden.**

This section requires the National Science Board Task Force on Administrative Burden to provide a report to Congress on its activities, findings, and recommendations.

**Sec. 122. Sense of Congress Regarding Innovation Corps.**

This section contains a sense of Congress stating that: NSF's Innovation Corps was established to foster a national innovation ecosystem; the Innovation Corps includes investment in entrepreneurship and commercialization education, training, and mentoring, leading to the practical deployment of technologies, products, processes, and services that improve the Nation's competitiveness, promote economic growth, and benefit society; and by building networks of entrepreneurs, mentors, institutions, and collaborations, and supporting specialized education and

training, the Innovation Corps is at the leading edge of a strong, lasting foundation for an American innovation ecosystem.

**Sec. 123. United States-Israeli Cooperation.**

This section amends the Energy Independence and Security Act of 2007 to state that NSF should collaborate with the Israel Science Foundation.

**Sec. 124. Sense of Congress regarding agricultural and drug interdisciplinary research.**

This section contains a sense of Congress stating that NSF should support basic science research in the plant sciences to identify and preserve valuable plant genes and interdisciplinary research to understand important basic research problems in the plant sciences.

**Sec. 125. Brain Research through Advancing Innovative Neurotechnologies Initiative.**

Section 125 encourages the NSF to support the funding of research activities related to the Brain Research through Advancing Innovative Neurotechnologies Initiative.

## **TITLE II – SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS**

**Sec. 201. Findings; Sense of Congress.**

Section 201 includes findings regarding the STEM workforce and STEM education. This section contains a sense of Congress stating that: more effective coordination and adoption of performance measurement based on objective outcomes for federally supported STEM programs is needed; leveraging private and non-profit investment in STEM is essential to strengthening the Federal STEM portfolio; strengthening the Federal STEM portfolio may require program consolidations and terminations, but that changes should be made based on evidence with stakeholder input; the President's FY 14 budget proposal did not explain proposed changes to the Federal STEM portfolio and did not elicit outside expertise in making those decisions, resulting in the need for Congress to limit forward movement on the proposal; and coordinating STEM programs and activities across the Federal Government in order to limit duplication and engage stakeholders will strengthen the results of our Federal STEM education programs and activities and in turn strengthen the United States economy.

**Sec. 202. STEM Education Advisory Panel.**

This section instructs the President to establish a STEM Education Advisory Panel incorporating key stakeholders from the education and industry sectors. It establishes qualifications for panel members. This section requires panel members to advise the President on matters relating to STEM education and to provide guidance to every agency with STEM program or activities. The panel must also assess: trends and developments in STEM; progress in STEM; criteria for evaluations the effectiveness of Federal STEM education programs and activities; ways to encourage public private partnerships to strengthen STEM; ways to leverage private and nonprofit investments and utilize expertise resulting from STEM-related competitions; ways to incorporate workforce needs into Federal STEM programs; the work of the STEM Education Coordinating Office and the committee on STEM education established under the National Science and Technology Council; and whether societal and workforce concerns are adequately

addressed by current Federal STEM programs. The panel must report to Congress and President on the aforementioned assessments. This section allows travel expenses for panel members.

**Sec. 203. Committee on STEM Education.**

This section amends the America COMPETES Reauthorization Act of 2010 to require the Committee on STEM Education to develop recommendations for the STEM Education Coordinating office to consider pertaining to specified concerns.

**Sec. 204. STEM Education Coordinating Office.**

Section 204 requires the Director of NSF to establish a STEM Education Coordinating Office within the Directorate for Education and Human Resources. This section outlines the responsibilities of the Coordinating Office. It requires the Coordinating Office to update the Federal Government STEM education strategic plan established in May 2013 every three years and coordinate the implementation of the plan across agencies. It also requires the Director of the Coordinating Office to submit an annual report to Congress containing: a description of STEM education programs across the Federal Government; an evaluation of duplication and fragmentation of Federal STEM programs and recommendations for consolidation or termination; a description of how the Federal government is leveraging private and non-profit expertise from STEM-related competitions to build the STEM workforce; and a description of the progress made in carrying out the three year strategic plan. This section requires the Director of NSF to encourage and monitor the efforts of the Coordinating Office to ensure that the strategic plan is implemented effectively.

### **TITLE III – OFFICE OF SCIENCE AND TECHNOLOGY POLICY**

**Sec. 301. Authorization of Appropriations.**

This section authorizes \$5,555,000 for fiscal year 2014 and \$5,555,000 for fiscal year 2015 for the Office of Science and Technology Policy.

**Sec. 302. Regulatory Efficiency.**

Section 302 includes a sense of Congress highlighting the problems with higher administrative costs for performing research and stating that it is critically important to American competitiveness that administrative costs for research be streamlined so that a higher proportion of taxpayer dollars flow into research. This section requires the Director of OSTP to establish a working group to review federal regulations affecting research and research universities and making recommendations on how to harmonize, streamline, and eliminate duplicative regulations and reporting requirements and minimize the regulatory burden on institutions of higher education performing federally funded research. The Director must submit a report to Congress on what steps have been taken to carry out the recommendations of the working group.

**Sec. 303. Public Access to Research Articles and Data.**

This section requires the National Science and Technology Council (NSTC) to establish policies, procedures, and standards for the Federal science agencies to enable archiving and retrieving covered materials in digital form for public availability in perpetuity. NSTC must use a transparent process for soliciting views from stakeholders. This section requires recipients of Federal research grants to make covered materials associated with the grant available. In making

such research available, each agency must provide for: submission of, or links to, an electronic version of materials by or on behalf of recipients of research grants made by the agency and free online public access to such covered materials as directed. Each Federal agency shall provide free online public access to research articles not later than 24 months after publication of the research article in a peer-review publication. At least once every five years, NSTC must review and revise, as appropriate, the policies, procedures, and standards established under this section. Extensions may be granted in consultation with stakeholders. Except as provided, nothing in this section shall be construed to affect titles 17 or 35 of U.S. Code. This section provides relevant definitions.

**Sec. 304. Strategic Plan for Advanced Manufacturing Research and Development.**

Section 304 amends the America COMPETES Reauthorization Act of 2010 to: require the Committee on Technology described to consult with the National Economic Council; identify barriers that inhibit United States advanced manufacturing (rather than “manufacturing”); require the strategic plan for advanced manufacturing to be updated every four years (rather than every five); require that the plan include a description of progress made in achieving the objectives from the National Strategic Plan for Advanced Manufacturing and any subsequent updates; and require the analysis of factors that impact innovation and competitiveness for U.S. manufacturing. This section would also update the reporting requirement in existing law and would create an advisory committee to assist with the development of the strategic plan. This section requires the President to include information regarding the consistency of the budget with the goals and recommendations for U.S. advanced manufacturing developed under this section.

**Sec. 305. Coordination of the International Science and Technology Partnerships.**

This section directs the Director of OSTP to establish a body under the National Science and Technology Council to identify and coordinate international science and technology cooperation that can strengthen the U.S. science and technology enterprise, improve economic and national security, and support U.S. foreign policy goals. It requires the Director of OSTP to submit an annual report to Congress describing the work of the body, the ongoing and new partnerships established since the last report, the means by which stakeholder input was received, and the issues influencing United States scientists’ abilities to collaborate with foreign counterparts.

**Sec. 306. Alternative Research Funding Models.**

This section requires the heads of science agencies to conduct pilot programs to validate alternative research funding models, including scientific breakthrough prize programs. It allows for pilot programs to be conducted through relationship with a non-Federal entity regarding the design, administration, and funding of the program. This section establishes parameters for judging prize competitions and requires prize competitions to be widely advertised. Finally, it requires a report to Congress on the programs identified and conducted.

**Sec. 307. Amendments to Prize Competitions.**

This section makes changes of a technical nature regarding prize competitions in the Stevenson-Wydler Technology Innovation Act of 1980.

## **TITLE IV – INNOVATION AND TECHNOLOGY TRANSFER**

### **Subtitle A- NIST Reauthorization**

#### **Sec. 401. Authorization of Appropriations.**

This section authorizes \$850,000,000 for fiscal year 2014 for the National Institute of Standards and Technology. This section specifies that \$651,000,000 shall be for scientific technical research and services laboratory activities, \$56,000,000 shall be for construction and maintenance of facilities, and \$143,000,000 shall be for industrial services activities. This section authorizes \$862,750,000 for fiscal year 2015 for the National Institute of Standards and Technology. This section specifies that \$660,765,000 shall be for scientific technical research and services laboratory activities, \$56,840,000 shall be for construction and maintenance of facilities, and \$145,145,000 shall be for industrial services activities.

#### **Sec. 402. Standards and Conformity Assessment and Other Transaction Authority.**

This section amends Section 2 of the National Institute of Standards and Technology Act by: adding language stating that the Director of NIST is authorized to serve “as the President’s principal adviser on standards policy pertaining to the Nation’s technological competitiveness and innovation ability”; replacing standards language to read: “facilitate standards-related information sharing and cooperation between Federal agencies”; expanding contracting language to include leases and other transactions; and enabling more seamless technical standards related information sharing. This section would also add language authorizing the Director of NIST to participate in and support scientific conferences and perform pre-competitive measurement science and technology research in partnership with higher education and industry to promote U.S. competitiveness.

#### **Sec. 403. Visiting Committee on Advanced Technology.**

Section 403 would amend Section 10 of the National Institute of Standards and Technology Act by changing the size of the Committee from 15 members to “not fewer than 9 members” and revising proportions of membership requirements accordingly. This section would also permit consultation with the National Research Council in making recommendations for policy. Finally, this section would remove references to the Technology Innovation Program from the required annual report on NIST.

#### **Sec. 404. Policy and Security Authority.**

This section would amend Section 15 of the National Institute of Standards and Technology Act to authorize the Secretary of Commerce to undertake activities for the protection of NIST buildings and other facilities.

#### **Sec. 405. International Activities.**

This section would amend Section 17(a) of the National Institute of Standards and Technology Act to expand permitted assistance to foreign nationals performing scientific work at NIST to include logistical assistance as well as financial. It explicitly states that such assistance may include transportation to and from the Institute of foreign dignitaries and representatives of foreign national metrology institutes.



**Sec. 406. Education and Outreach.**

Section 406 would codify education and outreach efforts critical to NIST's mission including the authority to provide stipends directly to students and teachers participating in NIST summer education programs and to United States citizens performing research and technical activities of NIST. This section states that the Director shall seek persons to receive such fellowships on the basis of ability and the relevance of the proposed work to the missions of NIST. It requires the Director to establish and conduct a post-doctoral fellowship program that shall include not less than 20 no more than 120 new fellows per fiscal year. This section would prohibit implementation of the Administration's proposed STEM reorganization plan.

**Sec. 407. Programmatic Planning Report.**

This section would require NIST's three year planning document to describe how the Director is addressing recommendations from the Visiting Committee on Advanced Technology.

**Sec. 408. Assessments by the National Research Council.**

This section would require NIST to contract with the National Research Council to perform and report assessments of the work conducted at NIST laboratories. Such assessments must be completed biennially by conducting annual assessments of at least three laboratories. This section describes additional process requirements for these assessments.

**Sec. 409. Hollings Manufacturing Extension Partnership.**

This section would amend Section 25 of the National Institute of Standards and Technology Act. It requires the Director to provide assistance for U.S. manufacturing, particularly small and medium-sized manufacturers, through the creation and support of Hollings Manufacturing Extension Centers. In order to enhance competitiveness, productivity and technological performance, Centers help manufacturers with adoption of advanced production technologies, transfer and dissemination of research findings, and other improvements. Centers are selected by the Director through a competitive, merit-based process; nonprofit institutions or consortia or state or local governments may apply. This section states that the Secretary may not provide more than 50 percent of the capital and annual operating and maintenance funds for a Center. This section would require Center applicants to provide assurances and, if selected, enter into legal agreements, that non-federal assets will meet not less than 50 percent of the costs incurred for the first three years, and an increasing share for the next three years. Section 409 would require each MEP to be evaluated in its third year of operation by a panel of private experts: a Center receiving positive evaluation may receive funding through the sixth year; a Center not receiving a positive evaluation is to be placed on probation. After the sixth year, a Center may receive additional support if it has received another positive evaluation. This section also would require a Center to undergo an independent eight year review. If a Center has received funding for 10 years the Director shall conduct a new competition. NIST is required to submit a report on the plan for conducting reviews, assessment and reapplication, and independent assessment of the reapplication competition process, as well as a report that assesses the effects of higher federal contributions to newly selected Centers on services provided to small manufacturing companies. Chapter 18 or title 35 and Section 552 or title 5 shall apply. Each Center is required to have a Board of Directors and an Advisory Board. Center Advisory Boards must institute conflict of interest policies to be approved by the Director and Board Members may not serve as a vendor or provide services to the Center. Centers may accept

funds from other federal agencies; the Director will determine whether those funds count toward the federal share. Funds from the private sector may not be considered towards the federal share. This section establishes the MEP Advisory Board, to consist of not fewer than 10 members serving three year terms, at least two on or from Center Advisory Boards and at least 5 from U.S. small manufacturing businesses. This section also sets other policies for the MEP Advisory Board and requires it to report to Congress on the status of the program within 30 days of the President's annual budget request. This section establishes a competitive grant program within the Hollings Manufacturing Extension Partnership in order to address new or emerging manufacturing problems determined by the Director. Centers or consortia of Centers may participate under the application and selection process described in this section. Grant recipients are not required to provide matching contributions. The Director may take into consideration whether an application has significant potential to enhance competitiveness of small and medium manufacturers. Grants shall not last more than 3 years. The Director is required to evaluate obstacles unique to small manufacturers. This section also provides a definition for community colleges.

**Sec. 410. Elimination of Obsolete Reports.**

This section would eliminate the report required by the Enterprise Integration Act of 2002 and the annual report on the Technology Innovation Program.

**Sec. 411. Modifications to Grants and Cooperative Agreements.**

Section 8(a) of the Stevenson-Wydler Technology Innovation Act of 1980 is amended by striking, “The total amount of any such grant or cooperative agreement may not exceed 75 percent of the total cost of the program.”

**Subtitle B – Innovative Approaches to Technology Transfer**

**Sec. 421. Innovative Approaches to Technology Transfer.**

This section revises Section 9 (jj) of the Small Business Act to provide guidelines for a grant program to support innovative approaches to technology transfer at institutions of higher education, non-profit research institutions, and Federal laboratories. This section details the process for awarding grants, the program oversight board's responsibilities, grant amounts, and program evaluation and data dissemination.

**TITLE V – NETWORKING AND INFORMATION TECHNOLOGY  
RESEARCH AND DEVELOPMENT**

**Sec. 501. Short Title.**

This title may be cited as the “Advancing America’s Networking and Information Technology Research and Development Act of 2014”.

**Sec. 502. Program Planning and Coordination.**

Section 502 would amend the High-Performance Computing Act of 1991 by adding periodic reviews to assess the Program Component Areas and to ensure that the Program includes large-scale, long-term, interdisciplinary research and development activities. This section would also amend the High-Performance Computing Act of 1991 to require the development of a strategic

plan to guide the activities described by the Act. It would amend the Act to add encouraging and monitoring the efforts of the agencies participating in the Program to allocate the level of resources and management attention necessary to ensure that the strategic plan is developed and executed effectively and that the objectives of the Program are met to the Director's responsibilities. This section would also amend the qualifications for membership on the advisory committee on high performance computing, and amend the criteria of the annual report on high performance computing and update the definitions in the Act.

**Sec. 503. Large-Scale Research in Areas of National Importance.**

This section would direct the National High-Performance Computing Program to encourage Federal agencies to support large-scale, long-term, interdisciplinary research and development activities in networking and information technology directed toward application areas that have the potential for significant contributions to national economic competitiveness and for other societal benefits.

**Sec. 504. Cyber-Physical Systems.**

This section would provide for increased understanding of the scientific principles of cyber-physical systems and improve the methods available for the design, development, and operation of cyber-physical system that are characterized by high reliability, safety, and security and providing for research and development on human-computer interactions, visualization, and big data. This section would require the Director of the National Coordination Office to convene a workshop to explore mechanisms for carrying out collaborative research and development activities for cyber-physical systems.

**Sec. 505. Cloud Computing Services for Research.**

Section 505 would require the Director of the National Coordination Office to convene an interagency working group to examine research and development needs related to cloud computing and how Federal science agencies can facilitate the use of cloud computing for federally funded science and engineering research. This section requires the working group to consult with specified stakeholders, and also requires the Director of the National Coordination Office to report to Congress on the findings and recommendations of the working group. The working group shall terminate upon transmittal of the report.

**Sec. 506. National Coordination Office.**

This section formally codifies the National Coordination Office with a Director and full-time staff. This section outlines the functions of this office and states that the operation of the Office will be supported by funds from each agency participating in the National High-Performance Computing Program.

**Sec. 507. Improving Networking and Information Technology Education.**

This section directs the NSF to use its existing programs to improve the teaching and learning of networking and information technology and to increase participation in networking and information technology fields.

**Sec. 508. Conforming and Technical Amendments.**

This section makes conforming and technical amendments.