SENATE

 $\begin{array}{c} \text{Report} \\ 109\text{--}280 \end{array}$ 

# DEPARTMENTS OF COMMERCE AND JUSTICE, SCIENCE, AND RELATED AGENCIES APPROPRIATIONS BILL, 2007

JULY 13, 2006.—Ordered to be printed

Mr. Shelby, from the Committee on Appropriations, submitted the following

# REPORT

[To accompany H.R. 5672]

The Committee on Appropriations to which was referred the bill (H.R. 5672) making appropriations for Science, the Departments of State, Justice, and Commerce, and related agencies for the fiscal year ending September 30, 2007, and for other purposes, reports the same to the Senate with an amendment, and an amendment to the title, and recommends that the bill, as amended, do pass. The Committee on Appropriations has addressed appropriations for the Department of State and Related Agencies for fiscal year 2007 in a separate bill. Appropriations for said agencies are not contained in the table below.

# Total obligational authority, fiscal year 2007

Total of bill as reported to the Senate	\$54,670,000,000
Amount of 2006 appropriations	53,480,612,000
Amount of 2007 budget estimate	52,243,183,000
Amount of House allowance	52,836,912,000
Bill as recommended to Senate compared to—	, , ,
2006 appropriations	+1,189,388,000
2007 budget estimate	+2,426,817,000
House allowance	+1,833,088,000

submissions also shall include a separate accounting of all program/mission reserves and impacts on estimated carry over funds.

#### NATIONAL SCIENCE FOUNDATION

Appropriations, 2006	\$5,581,166,000
Budget estimate, 2007	6,020,012,000
House allowance	6,020,012,000
Committee recommendation	5,991,690,000

The Committee recommendation provides \$5,991,690,000. The recommendation is \$410,524,000 above the fiscal year 2006 enacted

level and \$28,322,000 below the budget request.

The National Science Foundation [NSF] was established as an independent agency by the National Science Foundation Act of 1950 (Public Law 81–507) and is authorized to support research and education programs that promote the progress of science and engineering in the United States. The Foundation supports research and education in all major scientific and engineering disciplines through grants, cooperative agreements, contracts, and other forms of assistance in all parts of the United States. The Foundation also supports unique, large-scale research facilities and international facilities.

NSF is the principal Federal agency charged with promoting science and engineering education from pre-kindergarten through career development. This helps ensure that the United States has world-class scientists, mathematicians and engineers, and well-prepared citizens for today and the future. In today's global economy, continued progress in science and engineering and the transfer of the knowledge developed is vital if the United States is to maintain its competitiveness. NSF is at the leading edge of the research and discoveries that will create the jobs and technologies of the future.

The Committee has had to make difficult funding choices within the amount provided to the Foundation for the coming fiscal year. NSF plays a critical role in supporting fundamental research, education and infrastructure at colleges, universities, and other institutions throughout the country. Through these efforts, NSF provides funds for discovery in many fields, but also holds the unique stewardship within the Federal research and development enterprise of developing the next generation of scientists and engineers. In order to preserve NSF's intrinsic nature of providing basic re-

In order to preserve NSF's intrinsic nature of providing basic research grants across many scientific disciplines, the Committee has chosen to concentrate the available funds to areas that will preserve the Nation's ability to lead the world in the areas of basic research. Additional funding above the amounts provided in fiscal year 2006 for both the research and education accounts reflect this emphasis, as well as the desire of the Committee to provide as much opportunity for the Nation's current and future researchers.

The Committee is fully supportive of the American Competitiveness Initiative [ACI]. The funding levels anticipated for NSF will certainly provide the vital funding that will broaden the Nation's understanding in fundamental science disciplines. However, the Committee feels that the ACI neglects the education work NSF does in support of research across the country. Broadening participation to underrepresented groups, such as women and minorities, in the sciences will only further the goals of the ACI as proposed

in the budget request. For this reason, the Committee has chosen to redistribute a portion of the funds requested as part of this new initiative.

The Committee reiterates its long-standing requirement that NSF request reprogrammings when initiating new programs or activities or reorganizing components. The Committee directs the Foundation to notify the chairman and ranking minority member prior to each reprogramming of funds in excess of \$250,000 between programs, activities, or elements. The Committee expects to be notified of reprogramming actions which involve less than the above-mentioned amount if such actions would have the effect of changing the agency's funding requirements in future years, or if programs or projects specifically cited in the Committee's reports are affected.

#### RESEARCH AND RELATED ACTIVITIES

Appropriations, 2006	\$4,331,483,000
Budget estimate, 2007	4,665,950,000
House allowance	4,665,950,000
Committee recommendation	4,646,420,000

The Committee recommendation provides \$4,646,420,000. The recommendation is \$314,937,000 above the fiscal year 2006 enacted

level and \$19,530,000 below the budget request.

The Research and Related Activities appropriation addresses the Foundation's three strategic goals: people—developing a diverse, internationally competitive and globally engaged workforce of scientists, engineers, and well-prepared citizens; ideas-enabling discovery across the frontiers of science and engineering, connected to learning, innovation, and service to society; and tools—providing broadly accessible, state-of-the-art science and engineering facilities and shared research and education tools. Research activities will contribute to the achievement of these outcomes through expansion of the knowledge base; integration of research and education; stimulation of knowledge transfer among academia and public and private sectors; and international activities, and will bring the perspectives of many disciplines to bear on complex problems important to the Nation. The Foundation's discipline-oriented Research and Related Activities account include: Biological Sciences; Computer and Information Science and Engineering; Engineering; Geosciences; Mathematical and Physical Sciences; Social, Behavioral and Economic Sciences; U.S. Polar Research Programs; U.S. Antarctica Logistical Support Activities; and Integrative Activities.

To improve planning and priority-setting for the Foundation and improve the Committee's efforts to understand NSF's long-term budgeting needs, the Committee directs NSF to continue to provide multi-year budgets for all of its multi-disciplinary activities. For fiscal year 2007 and each year hereafter NSF shall provide the Committee with documentation that identifies these types of initia-

tives in future budget requests.

The Committee has provided the budget request of \$386,930,000 for polar research activities. Within this amount \$57,000,000 is provided for icebreaking activities.

The Committee recommends \$101,220,000 for the Plant Genome Research Program. The Committee remains a strong supporter of

this important program due to its potential impact on improving economically significant crops. The Committee also recognizes its

vast potential in combating hunger in poor countries.

The Committee recommends the requested amount of \$50,740,000 for the operations of the National Radio Astronomy Observatories. The operations, maintenance, and development of new instrumentation at the Very Large Array, the Very Long Baseline Array, and the Green Bank Telescope allow these world-class facilities to provide valuable research into the origins of the universe.

NSF has been the lead agency for the National Nanotechnology Initiative, and will continue to contribute to this emerging technology. The Committee recommends the full funding level requested for nanotechnology. This level of funding will allow the Foundation to continue to be the leader for this initiative. NSF is encouraged to make sure that public misconceptions of this field are minimized.

The Office of International Science and Engineering [OISE] has worked to ensure that U.S. researchers are involved with leading research across the globe. As research becomes more collaborative—with partnerships reaching across nations, the work of this office—identifying research opportunities around the globe—will grow. The Committee supports the fiscal year 2007 funding request for OISE in order to keep U.S. research at the forefront of global science.

#### MAJOR RESEARCH EQUIPMENT AND FACILITIES CONSTRUCTION

Appropriations, 2006	\$190,881,000
Budget estimate, 2007	240,250,000
House allowance	237,250,000
Committee recommendation	237,250,000

The Committee recommendation provides \$237,250,000. The recommendation is \$46,369,000 above the fiscal year 2006 enacted level and \$3,000,000 below the budget request.

The major research equipment and facilities construction appropriation supports the acquisition, procurement, construction, and commissioning of unique national research platforms and facilities as well as major research equipment. Projects supported by this appropriation will push the boundaries of technology and offer significant expansion of opportunities, often in new directions, for the science and engineering community. Preliminary design and development activities, on-going operations, and maintenance costs of the facilities are provided through the research and related activities appropriation account.

The Committee recommendation includes requested funding for five continuing projects, as follows: \$47,890,000 for the Atacama Large Millimeter Array [ALMA]; \$27,400,000 for EarthScope; \$28,650,000 for the IceCube Neutrino Observatory; \$42,880,000 for the Scientific Ocean Drilling Vessel; and \$9,130,000 for South Pole Station Modernization. The Committee feels that the highest priorities within this account are the projects that are currently under

construction.

The Committee understands that ALMA has recently been reviewed by NSF and may require additional funding beyond the

amounts requested within the fiscal year 2007 budget submission. If additional funds are required for ALMA, the Committee will consider a reprogramming of funds from within the resources provided

in this account to accommodate such funding needs.

In addition, the recommendation also includes funding for the following new projects: \$56,000,000 for the Alaska Region Research Vessel, which shall be home-ported in the same location as the vessel it is replacing, the Alpha Helix; \$13,500,000 for the Ocean Observatories Initiative; and \$12,000,000 for the National Ecological Observatory Network.

Finally, the recommendation does not include \$3,000,000 to reim-

burse the Department of Justice Judgment Fund.

#### EDUCATION AND HUMAN RESOURCES

Appropriations, 2006	\$796,693,000
Budget estimate, 2007	816,220,000
House allowance	832,432,000
Committee recommendation	835,750,000

The Committee recommendation provides \$835,750,000. The recommendation is \$39,057,000 above the fiscal year 2006 enacted

level and \$19,530,000 above the budget request.

The education and human resources appropriation supports a comprehensive set of programs across all levels of education in science, technology, engineering and mathematics [STEM]. The appropriation supports activities that unite school districts with institutions of higher learning to improve precollege education. Other precollege activities include the development of the next generation of precollege STEM education leaders; instructional materials; and the STEM instructional workforce. Undergraduate activities support curriculum, laboratory, and instructional improvement; expand the STEM talent pool; attract STEM participants to teaching; augment advanced technological education at 2-year colleges; and develop dissemination tools. Graduate support is directed to research and teaching fellowships and traineeships and instructional workforce improvement by linking precollege systems with higher education. Programs also seek to broaden the participation of groups underrepresented in the STEM enterprise, build State and regional capacity to compete successfully for research funding, and promote informal science education. Ongoing evaluation efforts and research on learning strengthen the base for these programs.

The Committee strongly encourages NSF to continue support for undergraduate science and engineering education. At a time when enrollment in STEM fields of study continues to decline, it is important that NSF use its position to support students working to-

wards degrees in these areas.

NSF must play a significant role in attracting more of the best and brightest students in the Nation into the science, mathematics, engineering, and technology fields as part of the American Competitiveness Initiative [ACI]. The Committee also urges NSF to work towards increasing the number of women, minorities, and other underrepresented groups to the greatest extent possible.

To address the importance of broadening science and technology participation is of concern to the Committee and the recommendation provides funding amounts for the following programs: \$32,000,000 for Historically Black Colleges and Universities—Undergraduate Program [HBCU-UP]; \$43,000,000 for the Louis Stokes Alliance for Minority Participation program; and \$30,000,000 for the Science, Technology, Engineering, and Mathe-

matics Talent Expansion program.

The Committee has included \$110,000,000 for the Experimental Program to Stimulate Competitive Research [EPSCoR], of which at least \$65,000,000 shall be used for the Research Infrastructure Improvement [RII] component supporting research areas aligned with statewide EPSCoR science and technology priorities. By providing additional funds for the EPSCoR program, the Committee feels that the goals of the ACI to keep the Nation competitive will be accomplished as the research and development capacity of the country is expanded.

## SALARIES AND EXPENSES

Appropriations, 2006	\$246,807,000
Budget estimate, 2007	281,822,000
House allowance	268,610,000
Committee recommendation	256,500,000

The Committee recommendation provides \$256,500,000. The recommendation is \$9,693,000 above the fiscal year 2006 enacted level

and \$24,720,000 below the budget request.

The salaries and expenses appropriation provides funds for staff salaries, benefits, travel, training, rent, advisory and assistance services, communications and utilities expenses, supplies, equipment, and other operating expenses necessary for management of the National Science Foundation's [NSF] research and education activities.

# OFFICE OF THE NATIONAL SCIENCE BOARD

Appropriations, 2006	\$3,949,000
Budget estimate, 2007	3,910,000
House allowance	3,910,000
Committee recommendation	3,910,000

The Committee recommendation provides \$3,910,000. The recommendation is \$39,000 below the fiscal year 2006 enacted level

and the same as the budget request.

The National Science Board is the governing body of the National Science Foundation. The Board is composed of 24 members, appointed by the President and confirmed by the Senate. The Board is also charged with serving as an independent adviser to the President and Congress on policy matters related to science and engineering research and education. By law, the Board establishes the policies of the National Science Foundation, provides oversight of its programs and activities, and approves of its strategic directions and budgets.

Given the increasing oversight responsibilities of the Board, driven by the growth of the Foundation, the Committee wants to ensure the Board continues to carryout effectively its policy-making and oversight responsibilities. The Committee is providing funding to support the operations, activities, training, expenses, and staff-

ing of the Board.

#### OFFICE OF INSPECTOR GENERAL

Appropriations, 2006	\$11,353,000
Budget estimate, 2007	11,860,000
House allowance	11,860,000
Committee recommendation	11,860,000

The Committee recommendation provides \$11,860,000. The recommendation is \$507,000 above the fiscal year 2006 enacted level and the same as the budget request.

The Office of Inspector General appropriation provides audit and investigation functions to identify and correct deficiencies that could create potential instances of fraud, waste, or mismanagement.

The funds provided will allow the OIG to further its efforts in several priority areas that pose the greatest risk to the agency: financial management, acquisition, information technology, human capital, award administration, awardee financial accountability and compliance, and the management of agency programs and projects.

#### EXECUTIVE OFFICE OF THE PRESIDENT

## OFFICE OF SCIENCE AND TECHNOLOGY POLICY

Appropriations, 2006	\$5,493,000
Budget estimate, 2007	5,369,000
House allowance	5,369,000
Committee recommendation	5,369,000

The Committee recommendation provides \$5,369,000. The recommendation is \$124,000 below the fiscal year 2006 enacted level and the same as the budget request.

The Office of Science and Technology Policy [OSTP] was created by the National Science and Technology Policy, Organization, and Priorities Act of 1976 (Public Law 94–282) and coordinates science and technology policy for the White House. OSTP provides authoritative scientific and technological information, analysis, and advice for the President, for the executive branch, and for Congress; participates in formulation, coordination, and implementation of national and international policies and programs that involve science and technology; maintains and promotes the health and vitality of the U.S. science and technology infrastructure; reviews and analyzes, with the Office of Management and Budget, the research and development budgets for all Federal agencies; and coordinates research and development efforts of the Federal Government to maximize the return on the public's investment in science and technology and to ensure Federal resources are used efficiently and appropriately.

The President's Science Advisor should continue to play an integral role in advising the President on the appropriate balance among and between disciplines and agencies in the Federal R&D portfolio. The Committee also expects the Science Advisor will conduct effective outreach to the science and engineering community and be an active and influential advisor to the President on important public policy issues grounded in science and technology.

The American Competitiveness Initiative [ACI] is a promising step toward keeping the country at the forefront of innovation and will provide the foundation for future leadership in the world in

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR FISCAL YEAR 2006 AND BUDGET ESTIMATES AND AMOUNTS RECOMMENDED IN THE BILL
FOR FISCAL YEAR 2007—Continued
[In thousands of dollars]

					Senate Com	Senate Committee recommendation compared	compared	
ma <del>l</del>	2006	Rudget estimate	House allowance	Committee		with (+ or -)		
Iron	appropriation	Dauger commune		recommendation	2006 appropriation	Budget estimate	House allowance	
				1,000,000	+1,000,000	+1,000,000	+1,000,000	
Natrina Kecovey (energency appropriations)	31,986	33,500	33,500	40,000 33,500	+ 40,000 + 1,514	+ 40,000	+ 40,000	
Total, NASA	16,631,414	16,792,227	16,709,000	17,797,227	+ 1,165,813	+ 1,005,000	+1,088,227	
National Science Foundation								
Research and related activities (non-defense)	4,264,825	4,598,430	4,598,430	4,578,900	+314,075	-19,530	-19,530	
Defense function	66,658	67,520	67,520	67,520	+ 862	3 000		16
Education and human resources	796,693	816,220	832,432	835,750	+ 39,057	+ 19,530	+3,318	0
Salaries and expenses	246,807	281,822	268,610	256,500	+ 9,693	-25,322	-12,110	
National Science Board	3,949	3,910	3,910	3,910	- 39			
Office of Inspector General	11,353	11,860	11,860	11,860	+ 507			
Total, National Science Foundation	5,581,166	6,020,012	6,020,012	5,991,690	+410,524	- 28,322	- 28,322	
Executive Office of the President								
Office of Science and Technology Policy	5,493	5,369	5,369	5,369	-124			
Total, title III, Science	22,218,073	22,817,608	22,734,381	23,794,286	+ 1,576,213	+ 976,678	+1,059,905	
Appropriations	(21,833,273)	(22,817,608)	(22,734,381)	(1,040,000)	(+921,013) (+655,200)	(-63,322) (+1,040,000)	(+19,905) (+1,040,000)	
TITLE IV—RELATED AGENCIES								
Antitrust Modernization Commission								
Salaries and expenses	1,157	462	462		-1,157	<b>- 462</b>	<b>–</b> 462	