

“Taken from Senate Report 108-344, FY 2005 Senate Report for Commerce, Justice, and State Appropriations bill...”

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY

Appropriations, 2004	\$621,494,000
Budget estimate, 2005	521,469,000
Committee recommendation	784,963,000

The Committee recommends an appropriation of \$784,963,000. The recommendation is \$163,469,000 above the fiscal year 2004 funding level and \$263,494,000 above the budget request. The recommendation provides that up to \$14,800,000 may be transferred from the Scientific and Technical Research and Services account to the Working Capital Fund, which the National Institute of Standards and Technology [NIST] uses to purchase equipment for its laboratories.

In light of budgetary issues and recent reductions-in-force, NIST is directed to consult the Committees on Appropriations before proceeding with further implementation of competitive outsourcing.

A description of each NIST account and the corresponding Committee recommendation follows:

SCIENTIFIC AND TECHNICAL RESEARCH AND SERVICES

Appropriations, 2004	\$340,743,000
Budget estimate, 2005	422,868,000
Committee recommendation	383,892,000

The Committee recommends an appropriation of \$383,892,000. The recommendation is \$43,149,000 above the fiscal year 2004 funding level and \$38,976,000 below the budget request. The recommendation provides the maximum funding deemed prudent for this account to insure that NIST meets its mission.

The Committee's recommendations are displayed in the following table with specific increases described:

SCIENTIFIC AND TECHNICAL RESEARCH AND SERVICES
[In thousands of dollars]

	Committee recommendation
Electronics and Electrical Engineering	49,191
Manufacturing Engineering	23,584
Chemical Science and Technology	43,542
Physics	41,515
Materials Science and Engineering	60,424
Building and Fire Research	21,594
Computer Science and Applied Mathematics	65,660
Technology Assistance	15,445
National Quality Program	5,400
Research Support Activities	57,537
Total, STRS	383,892

Within the funds made available for Electronics and Electrical Engineering, \$7,000,000 is for the Office of Law Enforcement Standards [OLES], of which \$4,000,000 is to fund the highest priority homeland security research projects. Projects managed by OLES are to be coordinated with the Department of Justice and the Department of Homeland Security. In addition, \$1,000,000 is for the nanoelectronics initiative which supports the development of semiconductor technologies.

Within the funds made available for Manufacturing Engineering, \$2,000,000 is for the nanomanufacturing initiative enabling critical infrastructural measurements and standards for the developing nanotechnology industry.

Within the funds made available for Physics, \$3,000,000 is for quantum computing. The Committee strongly supports NIST's Nobel Laureates' efforts in this area. The Committee believes their leadership could provide a revolutionary breakthrough in computing technology just as the transistor did over 50 years ago.

Within the funds made available for Materials Science and Engineering, \$6,000,000 is provided for upgrades to the National Center for Neutron Research in order to meet the increasing demands for this national scientific resource.

Within the funds made available for Building and Fire Research, \$2,000,000 is for measurements and standards for advanced fire fighting technologies. Numerous innovative technologies are becoming available for the Nation's fire departments. Unfortunately, there are few standard test methods able to assess the performance of these instruments. These devices represent a significant investment for the limited budgets of most fire departments. The current lack of test methodology forces fire departments to evaluate the performance based on 'word of mouth' and manufacturer literature.

Within the funds made available for Computer Science and Applied Mathematics, \$2,800,000 is for NIST's efforts in support of the Technical Guidelines Development

Committee, as established under the Help America Vote Act, Public Law 107-252. Additionally, the Committee acknowledges NIST's support of the US VISIT program and other biometric programs at the State and Justice Departments. As such, \$2,000,000 is provided to allow NIST to begin testing the accuracy of multimodal systems, develop guidelines for testing single finger and slap fingerprint segmentation methods, and determining the influence of multiple images on the accuracy of facial biometrics. The Nation's critical infrastructure is at constant risk due to inadequate security which is subject to exploitation, including the critical systems of the Federal Government. As such, NIST's Computer Security Division has been given important authorities and responsibilities by the Congress to conduct its mission of developing Federal standards, security guidelines, security checklists and associated methods and techniques for securing information systems, specifically Federal non-classified systems. These responsibilities are derived from the Federal Information Security Management Act and the Cyber Security Research and Development Act. Unfortunately, this important mission has not received the funding it requires. To begin to address this deficiency, the Committee recommendation includes \$10,000,000 to develop the standards, guidelines, security specifications, testing methods, checklists, and testing and scanning tools necessary to protect the Nation's cyberspace.

Within the funding for Research Support, an increase of \$1,533,000 is provided to the Competence program, \$11,000,000 is provided to transfer to the NIST Working Capital Fund to purchase equipment for the Advanced Measurement Laboratory, and \$10,000,000 is provided for Business Systems.

Chemical Science and Technology Study- The Committee understands that the current methods of bulk asbestos analysis were designed to segregate commercial asbestos products containing more than 1 percent asbestos and may be inadequate for determining low concentrations of asbestos that occur in the natural environment. The Committee is aware of private-sector interest in developing a mass-based method that is accurate to the 0.1-1 WT percent levels and which will segregate asbestos from non-asbestos particles on mine-grade samples of amphiboles and a method for distinguishing asbestos and non-asbestos particles in airborne filter samples. The Committee directs NIST to provide to the Committee not later than January 31, 2005, a determination on whether developing such a methodology is necessary, and if so, the process, cost, and timetable for developing this methodology.

INDUSTRIAL TECHNOLOGY SERVICES

Appropriations, 2004	\$216,480,000
Budget estimate, 2005	39,190,000
Committee recommendation	315,000,000

The Committee recommends an appropriation of \$315,000,000. The recommendation is \$98,520,000 above the fiscal year 2004 funding level and \$275,810,000 above the budget request.

Manufacturing Extension Programs [MEP]- The Committee recommends an appropriation of \$112,000,000 to fully fund all MEP centers. The recommendation is \$72,393,000 above the fiscal year 2004 funding level and \$72,900,000 above the budget request. The Committee also recommends bill language prohibiting the Secretary of Commerce from recompeting any existing Manufacturing Extension Center prior to 2007.

The Committee is aware of recent data indicating that in 2003 alone, MEP clients who had completed projects within the prior 12 months reported increased sales of \$953,000,000; retained sales of \$1,840,000,000; benefited from \$681,000,000 in cost savings; and created or retained 35,028 jobs. Meanwhile, as a result of the growing loss of American manufacturing jobs in the last year, the Commerce Department has proposed, over the past several months, a hodge-podge of small new programs to assist manufacturers, yet has provided very little support to the MEP center system which has a proven record. The Committee believes that fully funding the MEP centers is the most economical and prudent means of assisting small manufacturers that want to remain in the United States hiring American workers, and also want to stay competitive in the global market place.

Of the funds recommended, \$6,000,000 is provided to ensure small and rural States receive necessary manufacturing assistance and services. The Committee has reviewed the Department of Commerce's report 'Manufacturing in America' recommendations and is concerned that it is reorganizing the MEP program around a regional approach. The Committee recognizes that the original concept of 12 regional centers for MEP is not the best model to address the needs of small and medium-sized manufacturers. The Committee supported MEP's expansion in order to equalize services to all types of manufactures across the country. The Committee directs the Undersecretary of Technology Administration and NIST to provide the necessary coverage for small and medium-sized manufacturers. In addition, the Committee is concerned about the ability of small and rural States to provide adequate 'matching' funds. The Committee directs MEP to develop a program which will provide additional assistance to small and rural States and report back to the Committees on Appropriations by December 31, 2004, with an implementation plan.

Advanced Technology Program [ATP]- The Committee recommends an appropriation of \$203,000,000. This recommendation is \$23,825,000 above the fiscal year 2004 funding level and \$203,000,000 above the budget request. The amount, when combined with \$8,500,000 in prior year deobligations and carryover, will fully fund ATP awards. Within the amounts made available \$60,700,000 is to be used to fund new awards.

CONSTRUCTION OF RESEARCH FACILITIES

Appropriations, 2004	\$64,271,000
Budget estimate, 2005	59,411,000
Committee recommendation	86,071,000

The Committee recommends an appropriation of \$86,071,000. The recommendation is \$21,800,000 above the fiscal year 2004 funding level and \$26,660,000 above the budget request. The recommendation funds the highest priority safety, capacity, maintenance, and repair projects at NIST. Of the amounts provided, \$12,000,000 is for the next phase of the Central Utility Plant, \$3,800,000 is for the first phase of renovation of Building 1, and \$3,600,000 is to fully fund the renovation of Building 4 at the Boulder, CO, Laboratory, thus enabling the machine shop to be relocated from valuable scientific space. The Committee does not recommend funding for the NIST North relocation. The Committee has yet to receive the updated facilities report required by last year's appropriation, which would have provided detailed justification for the need of this relocation. The Committee has, however, received adequate and detailed information on the current state of disrepair of the Boulder Laboratory and renovation plans for that facility. The Committee understands the renovations in Boulder to be NIST's highest priority projects and recommends that NIST address these facilities. Additionally, within the amounts provided, \$19,171,000 is for safety, capacity, maintenance, and major repairs. This funding is to be used to address the high priority 'backlog' maintenance projects, such as asbestos abatement, site alarm system installation, environmental compliance, and necessary repairs needed in the Congressional Affairs Office.

Language is provided which will allow NIST to utilize the depreciation and use surcharge it collects from outside sources toward the repair and maintenance of its facilities. This surcharge is collected pursuant to OMB Circular A-25 and is currently returned to the Treasury's General Fund. OMB allows agencies to propose other uses of the funding collected, as such, NIST has proposed and had this language approved as part of its legislative proposal. Since this proposal is directly related to the appropriations of this account the Committee has included the proposed language in the bill.