

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY

Appropriations, 2001	\$597,016,000
Budget estimate, 2002	487,447,000
Committee recommendation	696,526,000

The Committee recommends a total of \$696,526,000 for the three appropriations accounts under the National Institute of Standards and Technology [NIST]. The recommendation is \$209,079,000 above the budget request. A description of each account and the Committee recommendation follows:

SCIENTIFIC AND TECHNICAL RESEARCH AND SERVICES

Appropriations, 2001	\$311,929,000
Budget estimate, 2002	347,006,000
Committee recommendation	343,296,000

The Committee recommends an appropriation of \$343,296,000. The recommendation is \$3,992,000 below the budget request.

The Committee recommendations are displayed in the following table:

Electronics and Electrical Engineering	\$41,132,000
Manufacturing Engineering	20,352,000
Chemical Science and Technology	38,712,000
Physics	37,054,000
Material Science and Engineering	62,532,000
Building and Fire Research	19,982,000
Computer Science and Applied Mathematics	56,478,000
Technology Assistance	17,679,000
National Quality Program	5,403,000
Research Support Activities	43,972,000
Total, STRS	343,296,000

Within the amounts provided, the Committee approves the following increases: (1) \$1,000,000 in the Manufacturing Engineering Program for the development of standards pertaining to the exchange of electronic data; (2) \$4,000,000 in the Physics program to provide measurements, standards, and test methods for the development of advanced nanotechnologies; (3) \$4,000,000 in the Computer Science and Applied Mathematics program to develop new measurements, test methods, and guidelines for the protection of the Nation's critical infrastructures; (4) \$2,000,000 in the Chemical Science and Technology Program to further develop measurement standards for in-vitro diagnostics; and (5) \$4,000,000 in the Computer Science and Applied Mathematics Program for quantum computing. The Committee does not recommend funding for the Critical Infrastructure Protection Grants Program. The Advanced Technology Program was developed to evaluate these types of grant applications. No funding is provided for

Commerce Department expert review teams. Presidential Decision Directive #63 clearly suggests that every department and agency of the Federal Government shall be responsible for protecting its own critical infrastructure, especially its cyber-based systems. While the program is laudable, it is clearly not the responsibility of the Department of Commerce to provide computer security to other Federal agencies; and, (4) under the Wind Research Program, the Committee recommends \$2,000,000 for wind engineering and \$2,500,000 to continue funding an existing cooperative agreement between NIST and Texas Tech University.

INDUSTRIAL TECHNOLOGY SERVICES

Appropriations, 2001	\$250,285,000
Budget estimate, 2002	119,266,000
Committee recommendation	309,337,000

The Committee recommends an appropriation of \$309,337,000. The recommendation is \$190,071,000 above the budget request.

Manufacturing Extension Partnership Program [MEP]- The Committee recommends an appropriation of \$105,137,000 to fully fund all of the MEP centers. The Committee recommends bill language to authorize the Secretary of Commerce to enter into agreements with nonprofit organizations to carry out collective research and development initiatives through the MEP. In addition, this language authorizes the Secretary to seek and accept contributions from public and private sources to support these efforts.

Advanced Technology Program [ATP]- The Committee recommends an appropriation of \$204,200,000. The recommendation is \$191,208,000 above the budget request. This amount, when combined with approximately \$11,000,000 in carryover, will fully fund ATP awards at current levels. Within the amounts made available, \$45,200,000 shall be used for administrative costs, internal laboratory support, and for Small Business Innovation Research Program [SBIR] requirements.

The Committee notes that the Advanced Technology Program has been extensively reviewed. Since the inception of the ATP, there have been 52 studies conducted on the efficacy and merits of the program. The General Accounting Office has conducted 14 studies; 10 studies have been completed by the Department of Commerce, Office of the Inspector General; former Secretary of Commerce William Daley sponsored a 60-day study, and the National Research Council published, 'ATP: Challenges and Opportunities' in 1999, and, 'ATP: Assessing Outcomes' in 2001. In addition, 25 studies have been done by ATP's economic assessment office. These assessments reveal that the ATP does not fund projects that otherwise could have been financed in the private sector.

Rather, the ATP facilitates so called 'valley of death' projects that private capital markets are unable to fund.

ATP has put a number of safeguards in place to ensure program funding does not replace private, venture capital funding. Since the 1998 competition, the ATP application form has included asking applicants to describe what efforts were made, prior to applying for ATP funding, to secure private capital for the project. In addition, this issue is addressed in oral reviews of project semifinalists.

The Committee maintains that the government should play a role in choosing promising technologies to fund. From the telegraph to the Internet to biomedical research, government investment has spurred the development of new technologies and new fields which have had great impact on and held enormous benefit for the American people. According to the National Academy of Sciences' National Research Council, ATP's approach is funding new technologies that can contribute to important societal goals. For example, ATP supported GE Medical Systems in the development of a new method of producing large-area, flat-panel amorphous silicon detectors for X-rays. The research significantly reduced the number of processing steps required to manufacture the panels and increased the yield. The panels are the heart of a new digital mammography system which was one of the biggest breakthroughs in mammography in 20 years. In the sense that it was possible to manufacture these panels before, the broad research goal was not unique. However, the innovative technology was unique, and its development is making digital mammography more affordable and more widely available to women.

The Committee concurs with the June 2001 National Academy of Sciences assessment; the many well-documented individual case studies; the Secretary's 1997 review; the February 1998 Development, Commercialization, and Diffusion Study; and the March 1999 review of the Performance of Completed Projects, all of which find that the ATP is a valuable and well-managed innovation program.

In the budget request, the administration proposed a gradual phasing out of the Advanced Technology Program. The Committee does not recommend this approach and is concerned that the ATP awarding process could be purposely hindered as a result of this difference of opinion. Therefore, the Committee directs the Department of Commerce to submit a written plan on how it intends on making timely ATP awards in fiscal year 2002. This plan should be submitted to the Appropriations Subcommittees on Commerce, Justice, State and the Judiciary before any funds are obligated for Department of Commerce, Departmental Management.

CONSTRUCTION OF RESEARCH FACILITIES

Appropriations, 2001	\$34,802,000
Budget estimate, 2002	20,893,000
Committee recommendation	43,893,000

The Committee recommends an appropriation of \$43,893,000. The recommendation is \$23,000,000 above the budget request and fully funds the highest priority safety, capacity, maintenance, and repair projects at NIST. Of the amounts provided, \$5,000,000 is provided for wiring improvements at the NIST research facility in Boulder, CO.