

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY (INCLUDING TRANSFERS)

The National Institute of Standards and Technology (NIST) promotes U.S. innovation and industrial competitiveness by advancing measurement science, standards, and technology in ways that enhance economic security and improve our quality of life.

The Committee recommendation includes \$816,860,000 for NIST for fiscal year 2009, which is \$178,860,000 above the request and \$61,013,000 above fiscal year 2008.

SCIENTIFIC AND TECHNICAL RESEARCH AND SERVICES

Fiscal Year 2008 enacted \$440,517,000
Fiscal Year 2009 request 535,000,000
Recommended in the bill 500,660,000
Bill compared with:
 Fiscal Year 2008 enacted +60,143,000
 Fiscal Year 2009 request -34,340,000

To carry out its mission, NIST has an intramural research program made up of laboratories and technical programs and national research facilities. The laboratories and technical programs develop and disseminate measurement techniques, reference data and materials, test methods, standards, and other infrastructural technologies and services required by U.S. industry. National research facilities include the NIST Center for Neutron Research and the Center for Nanoscale Science and Technology. NIST also manages the Baldrige National Quality Program, which promotes U.S. competitiveness in business, health care, education, and non-profit organizations through performance excellence criteria and other information transfer, and management of the Malcolm Baldrige National Quality Award. The Committee recommendation includes \$500,660,000 for NIST's scientific and technical core programs, which is \$60,143,000 above fiscal year 2008 and \$34,340,000 below the request.

The Committee notes that several of the proposed new initiatives are multi-year programs which add 85 new positions and cost \$29,840,000 in the first year alone.

Given that NIST has not provided the Committee with a strategic plan and did not seek industry input, the Committee chooses to defer funding for these initiatives to allow the new Administration the opportunity to evaluate the proposed programs, determine whether or not the significant multi-year investment involved fits within its priorities, and ensure that the proposed efforts are clearly focused. The Committee directs \$36,750,000 in increased funding for the following activities:

Measurements & Standards for Climate Change	\$7,500,000
Innovations in Measurement Science	3,000,000
National Earthquake Hazards Reduction	3,250,000
Disaster Resilient Structures	4,000,000
Cyber Security: Technologies for Interconnected Systems	5,000,000
Enabling the Hydrogen Economy	4,000,000
Enabling Nanotechnology from Discovery to Manufacture	3,500,000
Manufacturing Innovation/Supply Chain Integration	1,000,000
Quantum Information Science	3,500,000
NIST Center for Neutron Research	2,000,000

Measurement & Standards for Climate Change Program.--NIST has the opportunity to address critical gaps in climate change science that are limiting long-term climate policy decision-making by: (1) resolving discrepancies in satellite-based measurements of solar intensity; and (2) providing critical information about an atmospheric component believed to play a major role in global climate change. Numerous climate monitoring systems provide essential information for predictive modeling of future climate changes, but those measurements must be made with sufficient accuracy and precision. The *2003 Strategic Plan for the U.S. Climate Change Science Program (CCSP)* emphasizes this priority by directly citing NIST's role in providing national standards for instrumentation. The Committee provides \$7,500,000, which is \$2,500,000 above the request.

≤ INDUSTRIAL TECHNOLOGY SERVICES

Fiscal Year 2008 enacted	\$154,840,000
Fiscal Year 2009 request	4,000,000
Recommended in the bill	187,200,000
Bill compared with:	
Fiscal Year 2008 enacted	+32,360,000
Fiscal Year 2009 request	+183,200,000

This appropriation provides funding for the Manufacturing Extension Partnerships (MEP) program and the Technology Innovation Program (TIP). The Committee recommendation includes \$187,200,000, which is \$32,360,000 above the fiscal year 2008 enacted level and \$183,200,000 above the request. Of this amount, \$122,00,000 is provided for the Manufacturing Extension Partnerships (MEP) and

\$65,200,000 is provided for the Technology Innovation Program. The Committee does not agree with the Administration's attempt to eliminate these programs. In the current economic climate, these programs are critically important to ensure the competitiveness of U.S. businesses.

The MEP consists of a network of centers that provide business support and technical assistance services, and helps improve the productivity and competitiveness of small manufacturers. The centers are funded from matching Federal and State or local resources and fees charged for services.

The Committee notes that MEP leverages private resources in the creation and retention of jobs, thereby increasing economic output as well as Federal revenues. The MEP system is uniquely positioned to be the resource of choice for increasing the competitiveness of U.S.-based supply chains, and MEP is the only organization whose mission is to improve the competitiveness of U.S. manufacturing. The MEP nationwide network, with its direct reach to the Nation's manufacturers, has proven to be invaluable to numerous Federal government partners who utilize the network to distribute valuable, cutting-edge information and resources in areas of workforce, technology adoption, environment and energy, quality, and more.

The TIP was established in Section 3012 of the 2007 COMPETES Act. The purpose is to speed the development of high-risk, transformative research targeted to address key societal challenges. Funding is provided to small and medium-sized businesses, and institutions of higher education or other organizations, such as national laboratories and nonprofit research institutions to support, promote, and accelerate innovation in the US. These organizations research potentially revolutionary technologies that present high technical risks but meet critical national needs. TIP replaces the Advanced Technology Program (ATP) but allows for continued support for previous ATP awards.

CONSTRUCTION OF RESEARCH FACILITIES

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Fiscal Year 2008 enacted    $160,490,000  
Fiscal Year 2009 request      99,000,000  
Recommended in the bill     129,000,000  
Bill compared with:  
    Fiscal Year 2008 enacted  -31,490,000  
    Fiscal Year 2009 request   +30,000,000  
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This appropriation supports the construction of new facilities and the renovation and maintenance of NIST's current buildings and laboratories to comply with scientific and engineering requirements and to keep pace with Federal, State, and local health and safety regulations. The Committee recommendation includes

\$129,000,000, which is \$30,000,000 above the request and \$31,490,000 below fiscal year 2008.

The Committee fully supports the final phase of construction of the Building 1 Extension in Boulder; the requested expansion of the laboratories at JILA; the third and last fiscal year of funding increases required in the five year NIST Center for Neutron Research (NCNR) expansion and reliability improvements; and the fiscal year 2009 request for Safety, Capacity, Maintenance, and Major Repairs (SCMMR).

Competitive Construction grants- The Committee recommendation provides \$30,000,000 for competitive construction grants for research science buildings. Such buildings shall be evaluated on the scientific and technical merit of the proposed use and need for Federal funding; the quality of the design of the research science building; and the adequacy of the project execution plan. These grants shall be awarded to colleges, universities, and other non-profit science research organizations on a merit-based basis.