

**U.S. HOUSE OF REPRESENTATIVES
COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY
SUBCOMMITTEE ON RESEARCH AND TECHNOLOGY**

HEARING CHARTER

*An Overview of the Budget Proposal for the National Institute of Standards and Technology
for Fiscal Year 2017*

**Wednesday, March 16, 2016
10:00 a.m. - 12:00 p.m.
2318 Rayburn House Office Building**

Purpose

On Wednesday, March 16, 2016, the Subcommittee on Research and Technology will hold a hearing to examine the Administration's proposed fiscal year 2017 (FY17) budget request for the National Institute of Standards and Technology (NIST).

Witness

Dr. Willie E. May, Under Secretary of Commerce for Standards and Technology and Director, National Institute of Standards and Technology

Hearing Overview

The National Institute of Standards and Technology (NIST) is a non-regulatory science agency within the Department of Commerce. The Institute's mission is to promote 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. By working closely alongside industry, NIST is recognized as a provider of high-quality information utilized by the private sector.

This hearing will examine NIST's funding priorities for FY17. The President's budget request for NIST is \$1.01 billion, an increase of \$50.5 million (5.2%) from the FY 2016 enacted level. Included in this number is a \$14.9 million increase for inflationary cost changes.

National Institute of Standards and Technology (NIST) Overview

The National Institute of Standards and Technology (NIST) was originally founded in 1901 as the National Bureau of Standards. A non-regulatory agency within the Department of Commerce, NIST works to promote U.S. innovation and industrial competitiveness by advancing measurement science, standards, and technology. By working closely alongside industry, NIST has become recognized as a provider of high-quality information utilized by the private sector.

NIST operates two main research laboratories in Gaithersburg, Maryland, and Boulder, Colorado where it employs nearly 3,000 scientists, engineers, technicians, and support administrative personnel. In addition, NIST hosts about 3,500 associates and facility users from academia, industry, and other government agencies each year. ¹ At these locations, NIST Laboratories conduct research that advances the nation's technology infrastructure and helps U.S. companies continually improve products and services.

National Institute for Standards and Technology (NIST) Spending
(dollars in millions)

Account	FY15 Actual	FY16 Enacted	FY17 Request	FY17 Request vs. FY16 Enacted	
				\$	%
Scientific & Technical Research and Services (STRS)	675.5	690.0	730.5	40.5	5.9
Construction of Research Facilities (CRF)	50.3	119.0	95.0	-24.0	-20.17
Industrial Technology Services (ITS)*	138.1	155.0	188.9	33.9	21.9
<i>Manufacturing Extension Partnership (MEP)</i>	<i>130.0</i>	<i>130.0</i>	<i>142.0</i>	<i>12.0</i>	<i>9.2</i>
<i>Advanced Manufacturing Technology Consortia (AMTech)*As of January, 2016, AMTech and the NNMI have been merged.</i>	<i>11.7</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>
<i>National Network for Manufacturing Innovation</i>	<i>-</i>	<i>25.0</i>	<i>47.0</i>	<i>22.0</i>	<i>88</i>
Totals:	863.9	964.0	1,014.4	50.5	5.2

National Institute of Standards and Technology (NIST) Budget Summary²

The President's budget request for the National Institute of Standards and Technology (NIST) is roughly \$1.01 billion, an increase of \$50.5 million (5.2%) from the FY 2016 enacted level. Included in this number is a \$14.9 million increase for inflationary cost changes.

¹ <https://www.commerce.gov/directory/willieemay>

² <http://www.osc.doc.gov/bmi/budget/FY17BIB/AllFilesWithCharts2.pdf>

Scientific and Technical Research Services

The FY 17 Budget Request for NIST's Scientific and Technical Research Services (STRS) is \$730.5 million, an increase of \$40.5 million (5.9%) from FY 16 enacted levels. STRS includes NIST's laboratory programs, the national measurement and standards labs and user facilities, which would receive increased funding through the President's request. The Strategic & Emerging Research Initiative fund and postdoctoral research associates program would also be slightly increased in the request. The request includes increases for work conducted on measurement science for future computing technologies and applications, advanced sensing for manufacturing, biomanufacturing/engineered biology, addressing spectrum issues, neutron research, and lab to market/technology transfer promoting data sharing efforts.

Construction of Research Facilities

The FY 17 Budget Request for NIST's Construction of Research Facilities (CRF) is about \$95 million, a decrease of over \$24 million from FY 16 enacted levels (-20%). Base funds of \$40.0 million will continue the multi-year effort to renovate and modernize the Radiation Physics Building 245. The FY 2017 funding will allow NIST to begin the next phase of a multi-phased project for the Building 245 Modernization. NIST requests a \$4.751 million decrease to reduce the Safety, Capacity, Maintenance, and Major Repairs (SCMMR) program to approximately \$55 million for FY 2017, and a \$20 million decrease to reflect the completion of the initial efforts to improve the condition of the Gaithersburg Radiation Physics Building 245 with funding received in FY 2016.

Industrial Technology Services

NIST utilizes several programs to carry out its mission. The Hollings Manufacturing Extension Partnership (MEP) is a nationwide network of local centers offering technical and business assistance to smaller manufacturers to help them create and retain jobs, increase profits, and save time and money. NIST partners with 1,300 manufacturing specialists and staff at more than 400 MEP locations around the country.

Further, the National Network for Manufacturing Innovation (NNMI) aims to create a manufacturing research infrastructure for U.S. industry and academia to solve industry-relevant problems. In December 2014, the Revitalize American Manufacturing and Innovation Act of 2014 (RAMI Act), was signed into law as part of the Consolidated and Further Continuing Appropriations Act, 2015 (P.L. 113-235), which directed the Secretary of Commerce to establish a Network for Manufacturing Innovation program at NIST. Under this, NIST is authorized to use up to \$5 million per year of appropriated funds for FY2015-2024 to carry out its responsibilities under the act. This budget program was first explicitly appropriated funds in FY 2016 under the Consolidated Appropriations Act, 2016 (P.L. 114-113), which provides NIST with \$25 million in discretionary funds

The FY 17 budget request for NIST's Industrial Technology Services (ITS) is \$188.9 million, an increase of \$33.9 million or nearly 22 percent from FY 16 enacted levels. The Administration's request would zero out funding levels for the Advance Manufacturing Technology Consortia (AMTech) as AMTech has been merged with NNMI. The request includes \$142.0 million for the

Hollings Manufacturing Extension Partnership (MEP), a \$12.0 million increase from FY 16. The MEP will complete the effort started in FY 2014 to bring to a close the final round of competition of the MEP centers, maintain the funding of states previously competed, and provide funding for additional performance-based awards to high performing centers.

The ITS request also includes a \$22.0 million increase for NNMI, for a total of \$47.0 million (88% increase). The \$47 million request would be used to fund and maintain three institutes for up to seven years.