

## NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY

Taken from Senate Report 113-181 FY 2015 Appropriations Report

Appropriations, 2014 .....	\$850,000,000
Budget estimate, 2015 .....	900,000,000
Committee recommendation .....	900,000,000

The Committee's recommendation provides \$900,000,000 for the National Institute of Standards and Technology [NIST]. The recommendation is \$50,000,000 above the fiscal year 2014 enacted level and the same as the budget request. Up to \$9,000,000 may be transferred from the Scientific and Technical Research and Services account to the Working Capital Fund.

NIST'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.

A description of each NIST account and the corresponding Committee recommendation follows in the subsequent three headings.

### SCIENTIFIC AND TECHNICAL RESEARCH AND SERVICES

Appropriations, 2014 .....	\$651,000,000
Budget estimate, 2015 .....	680,000,000
Committee recommendation .....	685,000,000

The Committee's recommendation provides \$685,000,000 for NIST research and services. The recommendation is \$34,000,000 above the fiscal year 2014 enacted level and \$5,000,000 above the budget request.

*Cybersecurity.*—The Committee supports the administration's request for cybersecurity activities within NIST, which includes: \$15,000,000 for the National Cybersecurity Center of Excellence [NCCoE]; \$16,500,000 for the National Strategy for Trusted Identities in Cyberspace including further pilots; and \$4,000,000 for the National Initiative for Cybersecurity Education in order to address the need for a well-trained cybersecurity workforce. In addition, the Committee provides no less than \$60,700,000 for cybersecurity research and development, an increase of \$5,000,000 above the fiscal year 2014 level for cryptographic standards.

The Committee expects the NCCoE to evolve into a technology transfer hub for cyber solutions derived from Government and private sector tools. As companies continue to partner and coordinate with NCCoE, the Committee encourages NIST to create a plan for

increasing innovation opportunities by encouraging companies to co-locate near the Center. In order to maximize opportunities for collaboration with academia and business, the Committee encourages NIST to execute its responsibilities as coordinator of the National Initiative for Cybersecurity Education through the NCCoE.

The Nation's retail sector is increasingly vulnerable to and targeted by cyber-attacks that seek both private customer data and valuable intellectual property and which threaten the growing ecommerce marketplace. In order to assist the retail sector to innovate and stay ahead of evolving threats, the Committee encourages the NCCoE to build upon existing industry-sector focused work to create an initiative focused on retail sector challenges and solutions in addition to existing public-private partnerships and initiatives focused on the health, energy and financial sectors.

The Center should seek partnerships with national leaders in retail information technology [IT] security who have shown a willingness to innovate and involve their integrated supplier networks, as well as academic entities with experience in retail cybersecurity and retail supply chain management and logistics. The goal of this public-private partnership should be to enable cheaper and more widespread integration of advanced cybersecurity tools developed by the Federal Government for defense and homeland security applications to protect online financial transactions and retail IT networks.

The Committee encourages DOC to fund multidisciplinary programs of study and research that focus on tackling cybersecurity issues on a global scale. When establishing criteria for external grant funding, consideration should only be given to institutions of higher education, including community colleges, designated by the National Security Agency as Centers of Academic Excellence for Information Assurance Education and Centers for Academic Excellence for Information Assurance Research.

*Lab-to-Market Technology Transfer.*—More than \$135,000,000,000 in Federal research and development (R&D) spending is requested government-wide for fiscal year 2015. In order to maximize the impact of Federal R&D, the Committee has included the full budget request of \$6,000,000 for Lab-to-Market Technology Transfer. This funding will allow NIST to develop and disseminate best practices and strategies to accelerate the transfer and commercialization of Federal technologies to help discoveries become companies that create jobs and expand the economy. This initiative shall coordinate with the NCCoE to help promote cybersecurity technology transfer through NIST's cybersecurity hub.

*Centers of Excellence.*—The Committee includes the budget request level of \$15,000,000 to support Centers of Excellence selected in fiscal year 2013 and to be selected in fiscal year 2014 that produce collaborations between NIST, academic, and industry specialists on research focused on innovations in measurement science and new technology developments.

The Committee encourages NIST to propose funding to create an appropriate number of new centers of excellence in future fiscal years, including centers in fields such as advanced photonics, cryptography, and technologies associated with ribonucleic acid.

*Forensic Science.*—In addition to the funding requested to be provided to the Department of Justice and transferred to NIST, the Committee supports the full request for measurement science and standards in support of forensic science, an increase of \$3,500,000 above fiscal year 2014, and directs NIST to continue to coordinate its activities with the Department of Justice and the National Science Foundation.

*Scientific Working Group on Digital Evidence.*—Digital evidence is information stored or transmitted in digital form, including emails, the contents of computer memory, Internet browser histories, and many other items. Scientific Working Groups [SWG] consist of scientific subject-matter experts who collaborate to determine best practices and to develop consensus standards with the goal of improving the processes within a particular area of forensic science. The complex, diverse, and rapidly evolving technological advances of digital technologies dictates the need for a SWG in this field that is integrated into the Organization of Scientific Area Committees [OSAC] to establish consensus standards and guidelines to improve quality and consistency of forensic science practices for digital evidence.

The Committee understands that the memorandum of understanding between NIST and the Department of Justice specifically prohibits the establishment of a SWG for digital evidence under the new NIST structure and disagrees with this prohibition. The Committee therefore directs NIST to establish a SWG for digital evidence within the OSAC. The NIST-supported Digital Evidence SWG should develop a transition plan to ensure that the members and expertise of the Justice-supported SWG can be transitioned and fully integrated into the overall OSAC process.

*Urban Dome Program.*—The Committee notes the value of NIST's Urban Dome program and the importance of accurate measurement science for environmental monitoring and human health as more than half the world's population is living in urban areas, a level of concentration expected to intensify over the coming decades.

The Committee has included an additional \$2,000,000 for the Office of Special Programs to expand the number of urban dome locations in fiscal year 2015. The Committee expects a plan on the Urban Dome program including anticipated outcomes, inclusion of additional U.S. cities over the next 5 years, ways the United States can enlist the support of international partners for comparable efforts in other countries, and any plan for transitioning research to operations, including transitioning operations to another Government agency within the next 3 fiscal years. This plan should be submitted within 60 days of enactment of this act.

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*Facility Security.*—The Committee continues to provide funding for NIST to maintain security operations for its laboratories and facilities. The Federal Protective Services [FPS] has previously proposed to take over NIST’s security operations, yet the Committee has not received a plan from the administration that would detail the transfer of security funding and responsibility from NIST to FPS. Therefore, the Committee does not grant such a transfer during fiscal year 2015.

*STEM Education.*—The Committee continues to support NIST’s activities related to Science, Technology, Engineering and Mathematics [STEM] Education and fully funds its activities authorized under 15 U.S.C. 278g–2a.

**INDUSTRIAL TECHNOLOGY SERVICES**

Appropriations, 2014 .....	\$143,000,000
Budget estimate, 2015 .....	161,000,000
Committee recommendation .....	156,000,000

The Committee’s recommendation provides \$156,000,000 for Industrial Technology Services. The recommendation is \$13,000,000 above the fiscal year 2014 enacted level and \$5,000,000 less than the budget request. Supporting the Nation’s manufacturers, especially small businesses, is critical to keeping America innovative in a global marketplace. The Committee’s recommendation provides \$141,000,000 for the Hollings Manufacturing Extension Partnership Program and \$15,000,000 for the Advanced Manufacturing Consortia.

*Hollings Manufacturing Extension Partnership Program [MEP].*—The Committee recommends the full request of \$141,000,000 for MEP. The Committee supports the MEP focus on strengthening the existing network of MEP centers and providing additional support to centers based on the documented performance

of the center’s activities and the manufacturing capacity of the area served by the center. The Committee encourages centers, as appropriate, to support efforts to reshore manufacturing operations and jobs.

*Advanced Manufacturing Technology (AmTech) Consortia.*—Initial funding for AmTech was provided in fiscal year 2013. The program’s current activities include planning and small grants for industry-led consortia, which will identify and prioritize research projects supporting long term industrial research needs. The Committee reiterates its earlier view that there is no significant distinction between the AmTech consortia and the proposed National Network for Manufacturing Innovation [NNMI] institutes.

While NNMI has not been authorized, the Committee recognizes that the Department of Defense and the Department of Energy have begun investments in mission-related NNMI pilot institutes using discretionary funding, and NIST is responsible for coordinating these efforts through the Advanced Manufacturing National Program Office. The Committee has not provided the \$5,000,000 requested in the budget for NNMI coordination activities, but rather directs NIST to fund NNMI-related activities through AmTech, as in fiscal years 2013 and 2014. No funds are requested or provided for new NNMI pilot institutes. The Committee directs NIST to report, within 60 days of enactment, on the AmTech-related resources necessary in fiscal year 2015 and the resources it expects to need in future years to support the existing NNMI institutes and any potential growth should NNMI authorization legislation be enacted.

**CONSTRUCTION OF RESEARCH FACILITIES**

Appropriations, 2014 .....	\$56,000,000
Budget estimate, 2015 .....	59,000,000
Committee recommendation .....	59,000,000

The Committee’s recommendation provides \$59,000,000 for construction of research facilities. The recommendation is \$3,000,000 above the fiscal year 2014 enacted level and equal to the budget request.

The recommendation funds the highest priority construction, maintenance, and repair projects at NIST, including planning for renovation of Building 245. The Committee encourages NIST to include full funding to complete high priority projects like Building 245 renovation in the fiscal year 2016 request and directs NIST to provide quarterly reports on the status of all construction projects.