

Senate Report 113-078 - DEPARTMENTS OF COMMERCE AND JUSTICE, AND  
SCIENCE, AND RELATED AGENCIES APPROPRIATIONS BILL, 2014

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## SCIENTIFIC AND TECHNICAL RESEARCH AND SERVICES

Appropriations, 2013 <sup>1</sup>	\$608,295,000
Budget estimate, 2014	693,745,000
Committee recommendation	703,000,000
<sup>1</sup> Does not reflect the March 1, 2013, sequester of funds under Public Law 112-25.	

The Committee's recommendation provides \$703,000,000 for NIST research and services. The recommendation is \$94,705,000 above the fiscal year 2013 enacted level and \$9,255,000 above the budget request.

*Cybersecurity-* The Committee supports the administration's strong request for cybersecurity activities within NIST, which includes: \$15,000,000 for the National Cybersecurity Center of Excellence; \$15,000,000 for the Comprehensive National Cybersecurity Initiative; and \$24,500,000 for the National Strategy for Trusted Identities in Cyberspace. In addition, the Committee directs NIST to maintain funding for the National Initiative for Cybersecurity Education at \$4,000,000.

The Committee has included the budget request of \$15,000,000 for the National Cybersecurity Center of Excellence [NCCoE] and is encouraged by NIST's recent announcement that multiple companies have agreed to partner with the Center on various hardware, software, and best practice initiatives. The Committee remains supportive of NIST's proposal to transition management of the Center to a Federally Funded Research and Development Center co-located near NIST headquarters. The Committee expects the NCCoE to evolve into a technology transfer hub for cyber solutions derived from Government and private sector tools as they apply to specific sectors of the Nation's critical infrastructure, such as energy, financial services, telecommunications, transportation, and health, and as a key location for major research and development in cybersecurity as it applies to these and other key sectors of the U.S. economy.

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.

*Centers of Excellence.*--The Committee supports the administration's proposal to create Centers of Excellence that will produce collaborations between NIST, academic, and industry specialists on research focused on innovations in measurement science and new technology developments. Similar collaborations have already yielded significant benefits in areas of nanomaterials, healthcare, batteries and electrochemical energy conversion, and advanced photovoltaic devices.

As NIST begins the process of establishing those Centers, the Committee encourages NIST to create at least one Center of Excellence with a focus on forensic measurement science, technology, and standards. Interdisciplinary research to enhance forensic science was one of the recommendations made by the 2009 National Academy of Sciences report 'Strengthening Forensic Science in the United States: A Path Forward.' Enhanced science, technology, and standards in the areas of forensic science, especially computer forensics, are critical for the accurate collection, evaluation, and processing of evidence that is needed to strengthen our forensic science disciplines and to combat burgeoning Internet crime networks.

As part of the agency's 2014 spending plan, NIST is directed to provide an updated framework for creating an appropriate number of new centers of excellence from within the funds provided.

*Detection Canine Teams-* Detection canine teams play a critical role in the Nation's law enforcement and homeland security efforts. The capability of a properly developed and trained canine-handler team far eclipses other technologies. The Committee is concerned however, that scientifically validated standards, reference materials, and protocols governing the breeding, training, and deployment of detection canine teams do not currently exist. Standards, reference materials, and protocols are essential to ensuring the overall quality of canine teams and their training and deployment which ultimately provide long-term value and surety to the end user and the public. The Committee directs NIST to collaborate with academic and private sector experts recognized for their research on canine detection and olfaction to develop rigorous, scientifically validated breeding, training, and deployment standards, reference materials, and protocols for canine detection teams.

*Forensic Science.*--In lieu of the funding requested to be provided to the Department of Justice and transferred to NIST, the Committee has added \$5,000,000 for measurement science and standards in support of forensic science and directs NIST to coordinate its activities with the Department of Justice and the National Science Foundation. This funding is in addition to \$5,000,000 for forensic science included in NIST's request.

*Greenhouse Gas Measurements-* The Committee maintains support for NIST's greenhouse gas measurement programs and is aware of the need to develop

prototype greenhouse gas observation networks for measuring carbon dioxide and methane in the atmosphere at local scales. In order to increase confidence in greenhouse gas emissions inventories and to improve current measurement and standards infrastructure, NIST should continue to leverage existing assets and services from the private sector that maintain high quality atmospheric weather monitoring systems. The Committee recommendation includes an additional \$3,000,000 above the request to expand the number of locations in its public-private partnership to measure greenhouse gases on local and regional scales.

*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 2014.

*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, 2013 <sup>1</sup>	\$140,035,000
Budget estimate, 2014	174,507,000
Committee recommendation	184,507,000
1 Does not reflect the March 1, 2013, sequester of funds under Public Law 112-25.	

The Committee's recommendation provides \$184,507,000 for Industrial Technology Services. The recommendation is \$44,472,000 above the fiscal year 2013 enacted level and \$10,000,000 above 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 \$153,078,000 for the Hollings Manufacturing Extension Partnership Program and \$31,429,000 for the Advanced Manufacturing Consortia.

*Hollings Manufacturing Extension Partnership Program [MEP].--*The Committee supports the full request of \$153,078,000 for MEP. The request includes \$25,000,000 for a Manufacturing Technology Acceleration Center [M-TAC] within MEP. The Committee supports the MEP focus on next generation strategies like supply chain management that the M-TACs aim to address. However, the Committee believes these strategies should be implemented by and through the existing network of MEP centers. The recommendation supports the creation of three to four pilot M-TACs which shall be led by individual MEP centers or consortia of MEP centers.

*Advanced Manufacturing Technology (AmTech) Consortia*- Initial funding for AmTech was provided in fiscal year 2013. The program will establish industry-led consortia, which will identify and prioritize research projects supporting long term industrial research needs. In developing AmTech, the Committee encourages NIST to consider partnerships and investments in pharmaceutical manufacturing as well as more traditional areas of manufacturing, including clean energy.

Both the fiscal year 2013 and 2014 requests also included \$1,000,000,000 in mandatory funding for the National Network of Manufacturing Institutes [NNMI]. This Committee cannot initiate a \$1,000,000,000 mandatory program, and the authorizing committees have not acted on this proposal. 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 the NNMI through the Advanced Manufacturing National Program Office.

The proposed NNMI institutes would be public private partnerships in regional hubs that aim to accelerate development and adoption of cutting-edge manufacturing technologies for making new, globally competitive products. The Committee does not believe there is a significant distinction between the AmTech consortia and the proposed NNMI institutes. The Committee has provided \$10,000,000 above the request for AmTech and directs that at least one AmTech consortium using the pilot NNMI model be funded using discretionary funding provided for AmTech. The Committee also directs NIST to report, within 60 days of enactment, on how NNMI-related efforts can be merged into AmTech.

## **CONSTRUCTION OF RESEARCH FACILITIES**

Appropriations, 2013 <sup>1</sup>	\$58,756,000
Budget estimate, 2014	60,040,000
Committee recommendation	60,040,000
1 Does not reflect the March 1, 2013, sequester of funds under Public Law 112-25.	

The Committee's recommendation provides \$60,040,000 for construction of research facilities. The recommendation is \$1,284,000 above the fiscal year 2013 enacted level and equal to the budget request.

The recommendation funds the highest priority construction, maintenance, and repair projects at NIST. The Committee directs NIST to provide quarterly reports on the status of all construction projects.