POSITION DESCRIPTION

**undersecretary for Standards and technology, department of commerce**

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| **OVERVIEW** |
| Senate Committee | Commerce, Science and Transportation |
| Agency Mission | The mission of the Department of Commerce is to promote job creation and improved living standards for all Americans by creating an infrastructure that promotes economic growth, technological competitiveness and sustainable development. |
| Position Overview | The undersecretary of commerce for standards and technology (USC(ST)) is the principal advisor to the secretary of commerce on matters relating to technological development. The undersecretary also serves as the director of the National Institute of Standards and Technology (NIST) within the Commerce Department.As the director of NIST, the undersecretary is responsible for promoting American innovation and industrial competitiveness by advancing measurement science, standards, and technology to enhance economic security and improve the quality of life. |
| Compensation | Level III $165,300 (5 U.S.C. § 5314)[[1]](#endnote-1) |
| Position Reports to | Secretary of Commerce |
| **RESPONSIBILITIES** |
| Management Scope | As the director of NIST, the undersecretary oversees the operation of a non-regulatory agency that serves as the nation’s measurement standards laboratory, also known as a national metrological institute, with a current budget of $964 million, an estimated $50 million in service fees and $120 million for services rendered to other federal and state agencies on a cost-reimbursable basis. NIST employs approximately 3,400 federal scientists, engineers, technicians, support staff and administrative personnel at two main locations. It hosts approximately 3,500 associates from academia, U.S. industry and other government agencies, who collaborate with NIST staff and access user facilities. NIST also partners with more than 1,300 manufacturing specialists and staff at more than 400 Manufacturing Extension Partnership locations around the country.  Officials reporting to the USC(ST)/NIST director include:* Associate director for laboratory program/principal deputy
* Associate director for innovation and industry services
* Associate director for management resource
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| Primary Responsibilities | The primary function of the USC(ST) is to manage and oversee NIST, which includes the headquarters operations, laboratories, extramural programs and various standing committees. NIST facilities include:* The Communications Technology Laboratory, which promotes the development and deployment of advanced communications technologies through the conduct of leading-edge research and development on both the metrology and understanding of physical phenomena, materials capabilities and complex systems relevant to advanced communications
* The Engineering Laboratory, which promotes U.S. innovation and industrial competitiveness by advancing measurement science, standards and technology for engineered systems in ways that enhance economic security and improve quality of life
* The Information Technology Laboratory, which has the broad mission to advance measurement science, standards and technology through research and development of information technology, mathematics and statistics
* The Material Measurement Laboratory, which serves as the national reference laboratory for measurements in the chemical, biological and material sciences. Activities range from fundamental and applied research to the development and dissemination of certified reference materials and data to ensure the quality of measurement results.
* The Physical Measurements Laboratory, which is the world leader in the science of measurement. This laboratory determines the definitive methods for nearly every kind of measurement employed in commerce and research. It provides traceable calibrations and disseminates standards and best practices throughout the nation. It also works continuously at the outermost frontiers of metrology, devising tools and techniques to meet ever-changing demands of American industry and science.
* The Center for Nanoscale Science and Technology, which supports the U.S. nanotechnology enterprise from discovery to production by providing industry, academia and other government agencies with access to world-class nanoscale measurement and fabrication methods and technology
* The NIST Center for Neutron Research, which is a national center for research using [thermal and cold neutrons](https://www.ncnr.nist.gov/why_neutrons.html), and offers its instrumentation for use by all qualified applicants. Many of its instruments rely on intense beams of cold neutrons emanating from an advanced [liquid hydrogen moderator](https://www.ncnr.nist.gov/coldgains/).

Extramural NIST programs include:* The Baldrige Performance Excellence Program, which oversees the nation’s only presidential award for performance excellence, while offering a wide array of award-winning products and services, including the world-renowned Baldrige Excellence Framework
* The Hollins Manufacturing Extension Partnership, a public-private partnership with centers in all 50 states and Puerto Rico dedicated to serving small- and medium-size manufacturers
* The NIST Advanced Manufacturing Office, responsible for the NIST Manufacturing USA Institute Program, which funds industry-driven technology consortia that establish technology roadmaps addressing long-term U.S. industrial needs and serves as headquarters for the national Manufacturing USA program

NIST standing committees include:* The Technical Guidelines Development Committee, which supports the Election Assistance Commission by providing recommendations on voluntary standards and guidelines related to voting equipment and technologies. It is composed of 14 members selected from various standards boards for their technical and scientific expertise related to voting systems and equipment.
* The Advisory Committee on Earthquake Hazards Reduction, which assesses trends and developments in the science and engineering of earthquake hazards reduction, improved design and construction methods and practices, land use controls and redevelopment, prediction techniques and early warning systems, coordinated emergency preparedness plans and public education and involvement programs
* The Visiting Committee on Advanced Technology, which reviews and makes recommendations regarding general policy for NIST’s organization, budget and programs within the framework of applicable national policies as set forth by the president and Congress, and submits an annual report to the secretary of commerce for submission to Congress
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| Strategic Goals and Priorities | [Depends on the policy priorities of the administration] |
| **REQUIREMENTS AND COMPETENCIES** |
| Requirements | * Extensive leadership and management experience
* Strong scientific, technical, engineering and mathematics education
* Experience in the scientific and laboratory community and/or other relevant entities
* Substantive experience in strategy development
* Background or experience in budgeting, acquisition and workforce management
* Demonstrated record of achieving results
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| Competencies | * Strong communication and interpersonal skills
* Ability to integrate diverse missions and organizations
* Ability to work under high pressure
* Ability to inspire and motivate others
* High integrity and honesty
* Ability to build teamwork and collaboration
* Ability to create and manage change
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| **PAST APPOINTEES** |
| Willie E. May (2014 to 2017) – NIST Associate Director for Laboratory Programs; Director, NIST Chemical Science and Technology Laboratory; Chief, NIST Analytical Chemistry Division; Chief, Organic Analytical Research Division; Liquid Chromatography Group Leader; Research Chemist, NBS Analytical Chemistry Division; Senior Laboratory Analyst, Oak Ridge Gaseous Diffusion Plant |
| Patrick D. Gallagher (2008 to 2014) – Deputy Director, NIST; Director, NIST Center for Neutron Research; Research Physicist, NIST; Research Associate, Boston University  |
| William Jeffrey (2005 to 2008) – Deputy Director, Advanced Technology Office, Defense Advanced Research Projects Agency; Senior Director for Homeland and National Security/Assistant Director for Space and Aeronautics Office of Science and Technology; Assistant Deputy for Technology, Defense Airborne Reconnaissance Office |

# Endnotes

This position description was created with the help of MITRE Corporation, a not-for-profit company that provides innovative, practical solutions for some of the nation's most critical challenges in defense and intelligence, aviation, civil systems, homeland security, the judiciary, health care and cybersecurity.

1. The Consolidated Appropriations Act, 2017 (Public Law 115-31, May 5, 2017), contains a provision that continues the freeze on the payable pay rates for certain senior political officials at 2013 levels during calendar year 2017. [↑](#endnote-ref-1)