

# NIST

Standards Coordination Office



## Overview of NIST and the Standards Coordination Office

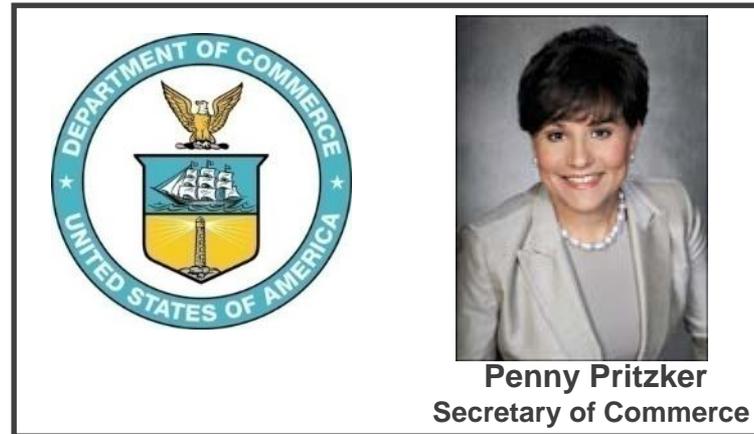
June 9, 2014

# NIST

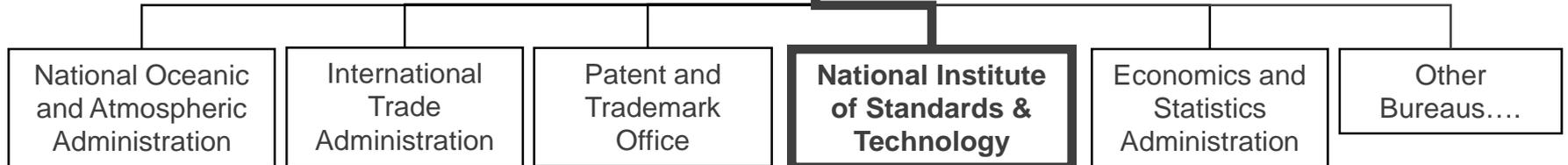
- Established by Congress in 1901 as the National Bureau of Standards
- Became the National Institute of Standards and Technology (NIST) in 1988
- NIST is a non-regulatory federal agency within the U.S. Department of Commerce



# NIST is part of the Department of Commerce



**Penny Pritzker**  
Secretary of Commerce



(National Weather Service)



**Pat Gallagher**  
NIST Director,  
Under Secretary of Commerce for Standards and Technology

# NIST Illustrated

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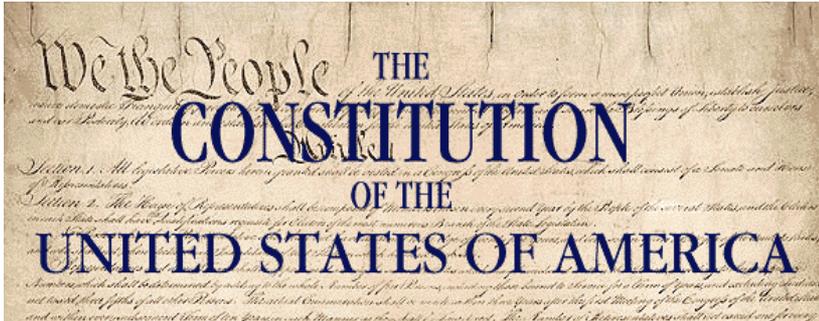
**NIST**  
**National Institute of  
Standards and Technology**  
**U.S. Department of Commerce**

**PATRICK GALLAGHER**

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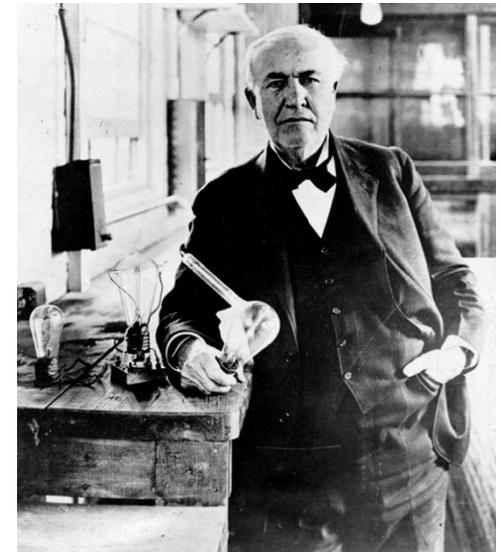


# Standards in NIST's DNA



**Article I, Section 8: The Congress shall have the power to...*fix the standard of weights and measures***

- Eight different “authoritative” values for the gallon
- Electrical industry needed standards
- American instruments sent abroad for calibration
- Consumer products and construction materials uneven in quality and unreliable



National Archives

# NIST's Mission

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.

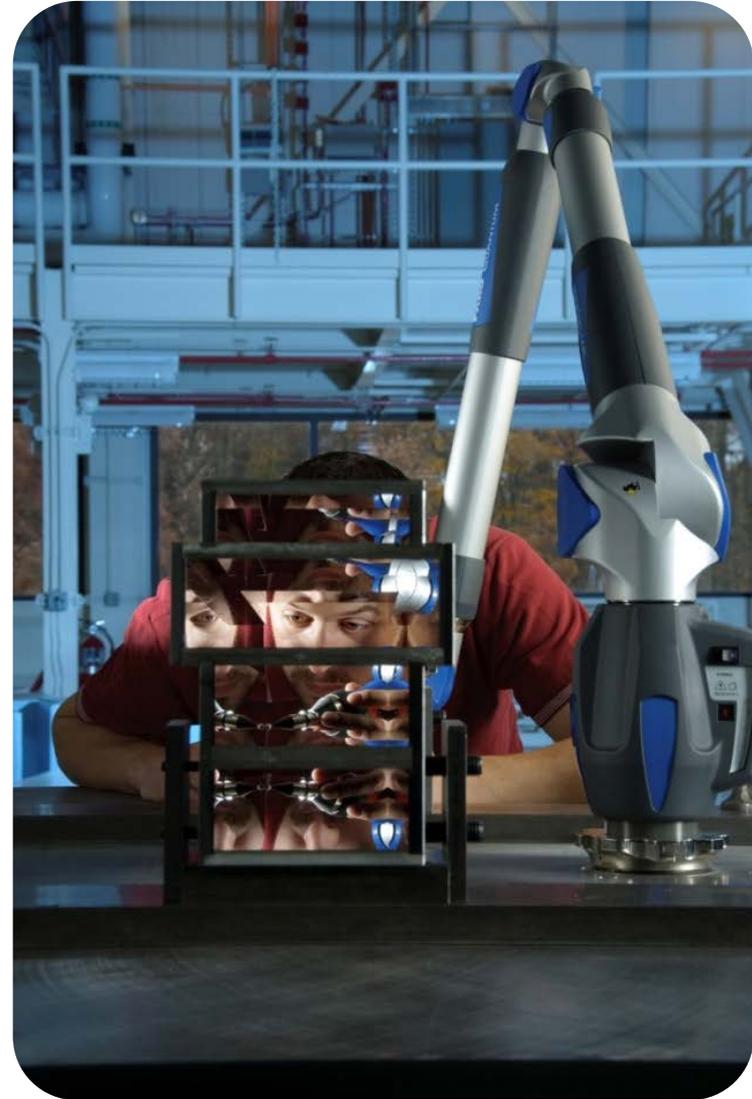
NIST carries out its mission through several programs including the NIST Laboratories.

The NIST Laboratories conduct world-class research, often in close collaboration with industry, which advances the nation's technology infrastructure and helps U.S. companies continually improve products and services.



# NIST: Basic Statistics and Facts

- Two locations: Gaithersburg, Maryland (headquarters) and Boulder, Colorado
- ~ 3,000 employees
- ~ 2,700 associates
- ~ 1,300 manufacturing specialists/staff
- NIST's FY 2014 resources totaled \$850 million, with an estimated additional annual income of \$47.3 million in service fees, and \$107 million from other agencies.
- Five external collaborative institutes: basic physics, biotech, quantum, marine science, and cybersecurity



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# NIST Priority Areas



TebNad  
**Advanced Manufacturing**



designersart  
**IT and Cybersecurity**



S.Bonk  
**Healthcare**



STILLEX  
**Forensic Science**



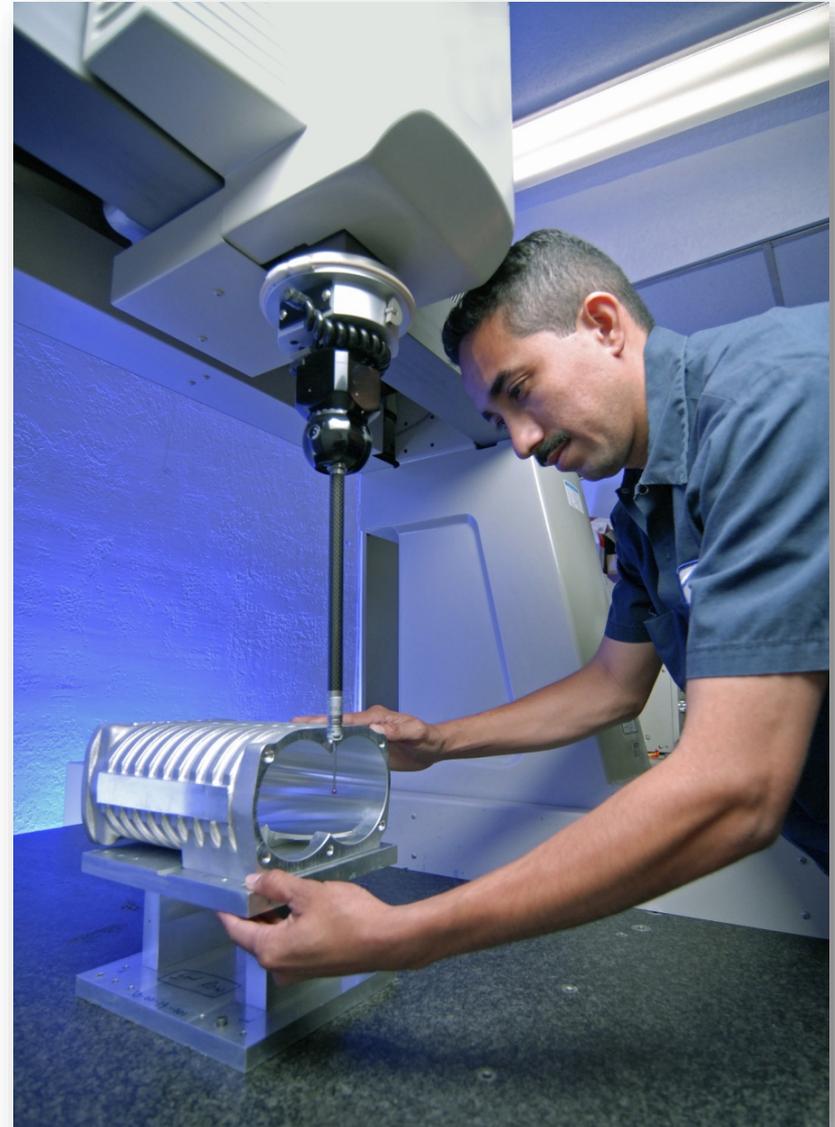
NIST  
**Disaster Resilience**



EnsUPER  
**Cyberphysical Systems**



Jovan Nikolic  
**Advanced Communications**



# NIST Has a Broad Impact



G. Hoojier/shutterstock.com

**Facilitates trade  
and fair commerce**



D. Stork/shutterstock.com

**Improves public  
safety and  
security**



06photo

**Improves quality,  
ensures uniformity**



B. Gardner

**Advances  
manufacturing and  
services**

# NIST Partnerships

## Industry



Agilent Technologies

intel.



## Universities



UNIVERSITY OF MARYLAND

University of Colorado at Boulder



Penn  
UNIVERSITY OF PENNSYLVANIA



THE UNIVERSITY OF WISCONSIN  
MADISON

## Nonprofits



INTERNATIONAL  
Standards Worldwide



International Technology Roadmap for Semiconductors



## Government



Homeland Security

# Standards Coordination Office (SCO)

SCO provides standards and conformity assessment expertise and services in support of government and industry

Coordinates government standards and conformity assessment activities, as well as coordinating with the private sector

Provides policy and technical guidance on standardization and conformity assessment for Federal agencies

Equips US industry with standards-related tools and information necessary to effectively compete in the global marketplace

# SCO Tools and Services

- WTO Technical Barriers to Trade Inquiry Point
- Standards Information Center
- Standards in Trade (SIT) workshops
- Mutual Recognition Agreement (MRAs) designation
- Standards and conformity assessment program development for federal agencies
- Standards and standardization curriculum development grants
- Laboratory accreditation
- NIST quality system oversight

# Training for Government Agencies



Standards Services training and workshops available to government agencies at no cost

Tailored to meet the needs of the requesting agency

Standards, conformity assessment and related topics of interest

<http://gsi.nist.gov/global/index.cfm/L1-4/L2-14>

# Did you know...?

- NIST's Internet Time Service is used by NASDAQ members to time-stamp hundreds of billions of dollars worth of stock trades conducted every business day;
- In the Army alone, 58,000 different types of equipment require regular "NIST traceable" calibration, ensuring that measurements made during the development, testing, maintenance, and operation are valid;
- NIST developed the testing procedures and other key technical elements of DHS's performance standards for radiation detectors used at U.S. seaports and airports;
- More than 3,000 law-enforcement officers have been spared from death or injury as a result of NIST-developed standards for ballistic-resistant body armor ("bullet-proof" vests);
- NIST led the development of performance standards for smoke detectors.



Thank You

# Overview of NIST and the Standards Coordination Office

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