

Director's Update

Visiting Committee on Advanced Technology
June 19-20, 2012

Dr. Patrick Gallagher

**Under Secretary of Commerce for Standards and Technology and
NIST Director**

Overview

- Welcome to new VCAT member
- NIST organizational changes
- FY 13 budget update
- TIP and Baldrige updates
- Cost control efforts
- NAS review of NIST manufacturing programs
- Overview of VCAT charge
 - Advanced Manufacturing
 - Public Safety
 - Forensic Science
 - Centers of Excellence
- Agenda Review

New VCAT Member

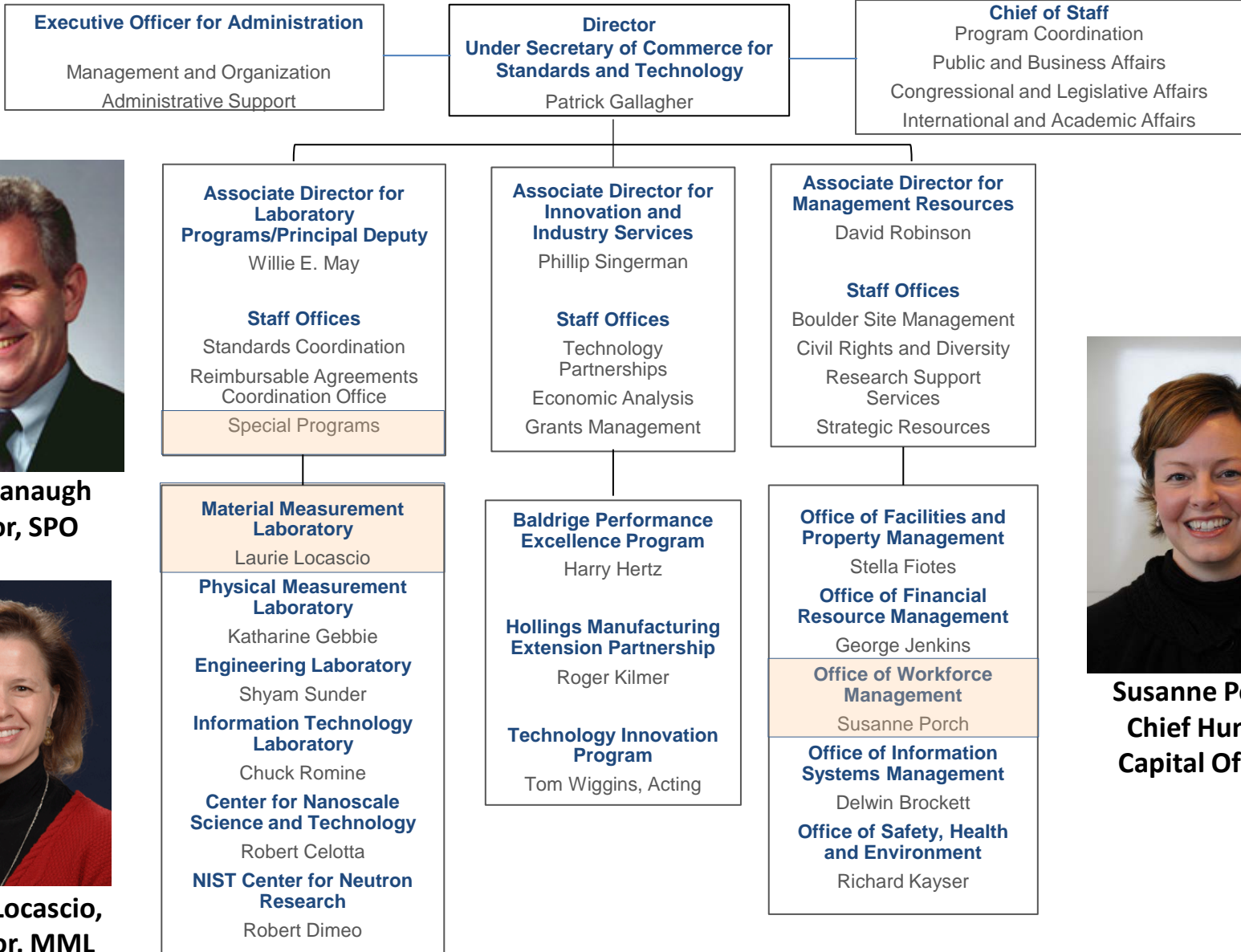
William Holt 

*Senior Vice President and
General Manager
Technology and Manufacturing Group (TMG)
Intel Corporation*



- Appointed Senior Vice President in 2006
- Served as general manager of TMG since 2005
- Responsible for R&D in the areas of wafer process, package assembly and test, and CAD tools and for corporate quality assurance and manufacturing equipment development.
- Joined Intel Corporation in 1974
- Governing Council Chair of the Focus Center Research Program at the Semiconductor Research Corporation

Organizational Changes



Rich Cavanaugh
Director, SPO



Laurie Locascio,
Director, MML



Susanne Porch,
Chief Human
Capital Officer

Budget Update

FY 2013 Request

- House Mark: \$826M
- Senate Mark: \$830M
- Includes \$1B mandatory funding for the National Network for Manufacturing Innovation and \$300K for Wireless Innovation Fund

FY 2014 Request

- NIST Request to DOC submitted on June 7

NIST FY 2013 Budget Request

	FY 2012 Enacted	FY 2013 Request	FY 2013 House Mark	FY 2013 Senate Mark
STRS	\$567.0 ^{1/}	\$648.0	\$621.2	\$623.0
Laboratory Programs	518.0	572.7		
Corporate Services	18.5	18.5		
Stds Coord. and Spec. Prgs.	30.5	56.8		
ITS	\$128.4	\$149.0	\$149.0	\$143.0
Advanced Manu. Tech. Consort.	0.0	21.0	21.0	14.5
Technology Innovation Prg.	0.0	0.0		
Baldrige Perf. Excellence Prg.	0.0	0.0		
Hollings Manuf. Ext. Prg.	128.4	128.0	128.0	128.5
CRF	\$55.4	\$60.0	\$60.0	\$60.0
Const. & Major Renovations	13.9	11.8		
Saf. Cap., Maint., Maj. Repairs	41.5	48.2		
Total, NIST Discretionary	750.8	857.0	830.2	826.0
Mandatory	\$0.0	\$1,300		
Wireless Innovation Fund	0.0	300		
National Network for Manufacturing Innovation	0.0	1,000		
Total NIST	\$750.8	\$2,157.0	\$830.2	\$826.0

^{1/} Includes \$10M for Cybersecurity Center of Excellence and \$16.5M for National Strategy for Trusted Identities in Cyberspace

Cost Control Efforts

- In May 2012, OMB has directed Federal agencies to reduce their costs for *travel, conferences, property, and fleet management*.
- Highlighted directives impacting NIST:
 - Minimum 30 % reduction in travel for FY 13 – FY 16 relative to FY 10 levels.
 - Senior level review of all planned conferences and all conference expenses > \$100K.
 - Prohibition of expenses > \$500K for a single conference
 - Disposal of excess properties and prohibition of new real estate acquisitions
 - Optimize management, replacement, and maintenance of government-owned vehicles.



Update on Technology Innovation Program

	Agreements	FTEs	Close-out Costs (\$M)
FY 2012	48	45	4.9
FY 2013	41	5	1.4
FY 2014	19	2	0.9

- Staff reduced from 45 at beginning of FY 2012 to 17 today; additional staff reduction anticipated by the end of the FY.
- Shutdown costs through FY 2014 will use reprogrammed STRS and prior year de-obligations.
- Archiving of TIP's (ATP's) legacy and valuable information for future use is 95% complete.

Update on Baldrige Performance Excellence Program

Transition to a New Business Model

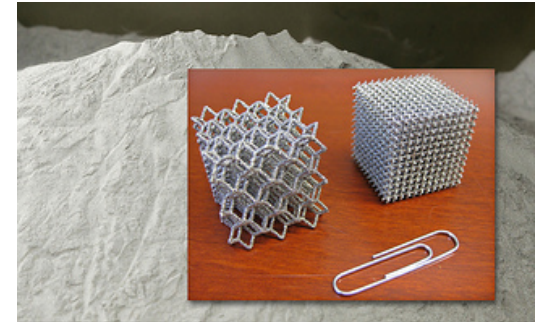
- The Baldrige Foundation has committed to fund the BPEP through fiscal year 2015 as the transition to the new business model takes place and has initiated a new endowment fundraising campaign.
- The new business model focuses on expanding markets, strategic partners and customer relationships, with the goal of long-term sustainability and growth for the Baldrige Program and its partner, the newly formed Baldrige Enterprise.
- New products, services and strategies will generate fee-based income, including education and training , a fee-based alternative assessment for organizations not eligible to apply for a Baldrige Award, and sponsorships of exhibits and activities at Baldrige events.
- Additional cost reduction will be realized via the elimination of operations that fall outside the BPEP core mission, streamlining the rest and shifting some activities to the Baldrige Enterprise partners.

NAS Review of NIST Manufacturing Programs

- NIST's mission-specific work supporting advanced manufacturing was reviewed by a National Academy of Sciences panel, March 2012.
- Panel was charged with assessing:
 - Technical merit and scientific caliber of NIST's manufacturing programs
 - Efficacy of NIST's engagement with outside stakeholders
 - Coordination and cohesion across NIST in the specified manufacturing areas
- Program areas covered:
 - Advanced Manufacturing NPO
 - Extramural manufacturing programs
 - Laboratory programs
 - Cross-cutting programs: smart manufacturing, nanomanufacturing, next-generation materials
- Preliminary feedback has been provided by panel, full report to be delivered in September. This will be shared with VCAT.

Overview of Major Issues: Advanced Manufacturing - NNMI

- President's FY 2013 budget proposes a \$1B investment to create a National Network for Manufacturing Innovation (NNMI).
- Mission of the NNMI is to bring together industry, academia, federal and state agencies to accelerate development of innovative manufacturing technologies.
- Collaboration between NIST, DoD, DoE, NASA and NSF to establish up to 15 institutes of manufacturing innovation.
- Charge to VCAT: Use recent recommendations for AMTECH as a launching pad, plus input from RFI and regional workshops, and provide feedback on the design of the NNMI.



Credit: Young/NIST



Credit: Heritage Global Partners

Overview of Major Issues:

Public Safety - First Responder Network Authority

- Middle Class Tax Relief and Job Creation Act of 2012 created a “First Responder Network Authority” (FirstNet) to build a broadband network for first responders and public safety officials.
- NIST will coordinate with NTIA, FirstNet, industry, and public safety organizations to develop interoperability standards, technologies, and applications to advance public safety communications.
- Funding for this effort (\$300M for NIST) is expected to be generated from the proceeds of a special auction of spectrum rights by the FCC.
- Charge to VCAT: Use recent report on the Nationwide Public Safety Communications System to address how NIST can best support the public-safety broadband network in the context of FirstNet legislation.



Credit: J. Emilio Flores/Getty Images

Overview of Major Issues: Forensic Science

- The President's FY 13 budget request includes a \$5M initiative for measurement science and standards in support of Forensic Science.
- A 2009 NRC study recommended improved measurement and validation methodologies, additional standards, and best practices to improve the precision and reliability of forensic science analyses.
- NIST and the Department of Justice have been developing plans for a joint NIST/DOJ program in forensic science and standards.
- Charge to VCAT: Provide feedback on the NIST analysis of the joint program plan and make recommendations on impact to NIST laboratory programs.



Credit: McGraw Hill

Overview of Major Issues: NIST Centers of Excellence

- The President's FY 13 budget request includes \$20M for up to 4 Centers of Excellence in measurement science areas defined by NIST.
- The Centers will provide an interdisciplinary environment where NIST, academia, and industry would collaborate on measurement science to enable technology innovations.
- NIST is in the process of developing a framework and governance plan for these Centers.
- Charge to VCAT: Share unique experiences in public-private collaborations to help ensure that the mission and goals of these centers are met.



VCAT Meeting Agenda Review

Day 1

- **Agenda Review and NIST Update**

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

- **Update on Safety Progress**

Rich Kayser, Chief Safety Officer, NIST

Tony Haymet, VCAT member

- **R&D Planning at NIST**

Willie May, Associate Director for Laboratory Programs, NIST

- **Overview of FirstNet**

Anna Gomez, Dep. Asst. Secy. for Communications and Information and Dep. Administrator, NTIA

- **Public Safety Communications Research**

Dereck Orr, Program Manager, Public Safety Communications Standards, NIST

- **Current Administration's Policy Framework for Advanced Manufacturing**

Phillip Singerman, Associate Director for Industry and Innovation Services, NIST

- **Administration's Implementation of Advanced Manufacturing Priorities**

Mike Molnar, Chief Manufacturing Officer, NIST.

VCAT Meeting Agenda Review

Day 1 (Continued)

- **Advanced Manufacturing Activities in the NIST labs**

Advanced Materials for Industry: NIST and the MGI

Laurie Locascio, Director, Material Measurement Laboratory, NIST

Foundations for Innovation in Cyber Physical Systems

Shyam Sunder, Director, Engineering Laboratory, NIST

- **Summary Discussion**

Vinton Cerf, VCAT chair

Day 2

- **NIST Centers of Excellence**

Willie May, Associate Director for Laboratory Programs, NIST

- **National Cybersecurity Center of Excellence**

Chuck Romine, Director, Information Technology Laboratory, NIST

- **Federal Engagement in Standards and Conformity Assessment**

Mary Saunders, Director, Standards Coordination Office, NIST

VCAT Meeting Agenda Review

Day 2 (Continued)

- **Tour of Net-Zero Energy Residential Test Facility**
Steve Bushby, Brian Dougherty, and Vance Payne, NIST Energy and Environment Division
- **Wrap-up Discussion, Review of Action Items, October VCAT meeting**
Vinton Cerf, VCAT chair
- **Adjourn Meeting**