

## Update: NIST Cybersecurity Activities

#### Donna F. Dodson

February 7, 2018



## Cultivating trust in technology through cybersecurity

- Research, development & transition to practice
- Standards & best practices
- Outreach
- Interagency coordination



## Cryptography



Shutterstock

Developing **standards**, **best practices**, **tools** & **tests** → cultivate trust in cryptography

- Quantum resistance cryptographic standards
- Key management best practices
- Better testing mechanisms
- Blockchain & lightweight

**Increased capacity** 



### **Risk Management**

#### Building better mechanisms to **understand & manage cybersecurity risks**...

- Cybersecurity framework
- Security and privacy controls
- System lifecycle & risk management



hutterstock



### Internet & Communications Infrastructure



Shutterstock

Cultivating **trust in IoT** & promote U.S. leadership through:

- Definitions, guidance& best practice documentation
- Research (IoT reference data) & enabling software tools
- Coordination of standards in the digital economy (across sectors)



## Practical Applications & Technology Transfer

# Building **trust** in technology by driving adoption of **standards-based cybersecurity solutions** to address business needs





#### **Current Mandates**

- Federal Information Systems Modernization Act
- Cybersecurity Enhancement Act of 2014
- OMB Circular A-130: *Managing Information As a Strategic Resource*
- Presidential EO 13800: Strengthening the Cybersecurity of Federal Networks & Critical Infrastructure
- National Cybersecurity Center of Excellence





#### **Current Mandates**

- National Cybersecurity Center of Excellence (P.L. 112-55)
- Help America Vote Act
- Computer Security Research and Development Act of 2002





#### **Calls for Expanded NIST Role in Cybersecurity**

- S.1885, American Vision for Safer Transportation through Advancement of Revolutionary Technologies (AV START) Act
- H.R. 1224, NIST Cybersecurity Framework, Assessment, & Auditing Act of 2017
- H.R. 1324, Securing the Internet Of Things Act of 2107
- H.R. 1562, Secure America's Future Elections Act
- H.R. 1981, Cybersecurity Education and Federal Workforce Enhancement Act



#### **Calls for Expanded NIST Role in Cybersecurity**

- H.R. 2105, NIST Small Business Cybersecurity Act of 2017
- S.536, Cybersecurity Disclosure Act of 2017
- S.770, MAIN STREET Cybersecurity Act of 2017
- S.2179, Data Security and Breach Notification Act



#### Discussion



NIST VCAT