United States Senate
WASHINGTON, DC 20510

April 11, 2018

The Honorable Richard Shelby
Chairman
Subcommittee on Commerce, Justice,
Science and Related Agencies
Senate Appropriations Committee
142 Dirksen Senate Office Building
Washington, DC 20510

The Honorable Jeanne Shaheen
Ranking Member
Subcommittee on Commerce, Justice,
Science and Related Agencies
Senate Appropriations Committee
125 Hart Senate Office Building
Washington, DC 20510

Dear Chairman Shelby and Ranking Member Shaheen,

As you begin work on the Fiscal Year (FY) 2019 Commerce, Justice, Science, and Related Agencies Appropriations Legislation, we write in support of the National Institutes of Standards and Technology (NIST) and several of its critical missions. We request that the NIST Scientific and Technical Research Services receive at least $775 million and that the NIST Industrial Technology Services receive $155 million for FY 2019.

NIST research programs work at the frontiers of measurement science to ensure that the U.S. system of weights and measures is firmly grounded in sound scientific and technical principles. For example, NIST scientists built the first atomic clock in 1949. Today, atomic clocks help the world keep time to within a billionth of a second. This level of accuracy enables Global Positioning System (GPS) receivers to instantaneously calculate their position. It would be impossible to have a functioning GPS system without innovations from NIST researchers.

Funding for NIST Scientific and Technical Research Services is critical to maintaining partnerships with universities across the country that enable NIST to fulfill its mission, leverage expertise, and train a robust scientific workforce. For example,

- **JILA**, a joint institute between NIST and the University of Colorado Boulder, explores physics, nanoscience, precision measurement, and quantum information.
- **The Joint Quantum Institute** brings together scientists from the University of Maryland, NIST, and the Laboratory for Physical Sciences to better understand how to leverage quantum systems for information science and technology.
- **New Materials for Logic, Memory, and Interconnects (NEW LIMITS)** is a consortium led by Purdue University with the University of Texas at Dallas, Penn State University, University of Michigan, and Stanford University focused on the development of new materials for novel computing and storage technologies, enabling U.S. semiconductor producers to remain on the cutting edge.

In addition, NIST hosts high school and undergraduate students as summer researchers to help inspire and train the next generation of scientists and engineers.

NIST also performs groundbreaking research in forensic science methods through its federal innocence and forensic science programs, which increase the accuracy and fairness of the criminal justice system, provide the strongest possible tools to stakeholders, and lead to greater public safety.

The Industrial Technology Services' Hollings Manufacturing Extension Partnership (MEP) enhances the productivity and performance of U.S. manufacturing by partnering with state and local governments and the private sector to provide expertise and resources to manufacturers to solve problems, increase productivity, and improve their economic competitiveness.

We appreciate the support in FY 2018 for expanding NIST's National Cyber Security Center of Excellence (NCCoE), which addresses businesses' most pressing cybersecurity problems with practical, standards-based solutions using commercially available technologies. We request that this support continue so that NCCoE can continue to enhance cybersecurity and protect national information systems.

As new technologies emerge, NIST remains central to our national defense, homeland security, trade, and innovation. Increasing funding for Scientific and Technical Research Services and maintaining current funding for Industrial Technology Services is a national security imperative, fosters innovation, and strengthens American competitiveness. For these reasons, we urge you to make strong and sustained funding for NIST one of your highest priorities.

Sincerely,

Richard J. Durbin
United States Senator

Chris Van Hollen
United States Senator

Richard Blumenthal
United States Senator

Tammy Duckworth
United States Senator

Mazie K. Hirono
United States Senator

Michael F. Bennet
United States Senator

Benjamin L. Cardin
United States Senator

Maria Cantwell
United States Senator