

POSITION STATEMENT

ACHIEVING GREATER VALUE FROM FEDERAL RESEARCH LABORATORY INVESTMENT

*Adopted by the IEEE-USA
Board of Directors (22 Nov. 2019)*

The increasingly competitive International R & D Environment is presenting a highly dynamic and critical challenge. Fundamental discovery-driven scientific research is critical to our long-term economic growth and societal well-being^{1,2}. Federal laboratories, including national research laboratories, Federally Funded Research and Development Centers ([FFRDCs](#)), and University Affiliated Research Centers (UARCs), are important incubators of fundamental research and subject matter research experts in critical technologies for U.S. security and economic prosperity. It is vitally important that the research and development (R&D) conducted at these institutions addresses the critical challenges facing our nation, and that these institutions house and maintain outstanding infrastructure, facilities, and workforce to continue this mission. Enhanced facilities, productive collaborations, and reduced administrative burdens can combine to result in even greater value from the U.S. federal research laboratory investment.

To that end, IEEE-USA recommends Congress and the administration take measures to ensure that:

1. Federal agencies periodically review and modify their portfolio of R&D programs undertaken by their respective laboratories to better nurture scientific exploration, engineering development and innovation, and educational outreach that complement their core missions.
2. Federal agencies continually improve their in-house expertise and manage their research portfolios to ensure an appropriate balance between federal laboratory and contracted R&D that will generate high-impact discoveries, attract and retain our nation's best talent, meet evolving critical mission needs, maintain

¹ R. M. Solow, "Technical Change and the Aggregate Production Function," *Review of Economics and Statistics* **39**, 312–320, 1957.

² President's Council of Advisors on Science and Technology, "*Transformation and Opportunity: The Future of the U.S. Research Enterprise*", 2012.

responsive capabilities, contribute to higher living standards, and boost productivity.

3. Federal laboratories receive the funding needed to establish, preserve and maintain top-caliber laboratory facilities and infrastructure necessary for addressing our nation's critical research requirements. Agencies should review existing facilities and infrastructure at federal laboratories to ensure they are best-in-class to meet mission needs.
4. Federal laboratories extend their efforts to collaborate with universities and the private sector to create partnerships for more rapid technology transition, ensuring that funded efforts incorporate vehicles for technology transition to the maximum extent possible.

This statement was developed by the IEEE-USA Research and Development Policy Committee, and represents the considered judgment of a group of U.S. IEEE members with expertise in the subject field. IEEE-USA advances the public good, and promotes the careers and public policy interests of the nearly 180,000 engineering, computing and allied professionals who are U.S. members of the IEEE. The positions taken by IEEE-USA do not necessarily reflect the views of IEEE, or its other organizational units.