

GAO Highlights

Highlights of [GAO-20-306T](#), a testimony before the Committee on Science, Space, and Technology, House of Representatives

Background

Rapid developments in S&T are transforming multiple sectors of society, including medicine, transportation, communication, defense, and even culture. Like all technological change, each of these developments brings opportunities and potential unintended consequences. The ability of Congress to understand and evaluate such changes will be critical for the United States to remain safe, innovative, and globally competitive.

GAO's mission is to support Congress in meeting its constitutional responsibilities and to help improve the performance and ensure the accountability of the federal government for the benefit of the American people. The 2019 Legislative Branch Appropriations Bill Conference Report encouraged GAO to reorganize its S&T function by creating a new office. In January 2019, GAO created the STAA team to build on and expand its decades-long work providing Congress with science and technology analysis.

This statement discusses (1) GAO's S&T products and services for Congress; (2) how GAO is structured to provide S&T advice to the Congress; and (3) GAO's plan to continuously improve its S&T advising capabilities.

View [GAO-20-306T](#). For more information, contact Timothy M. Persons, Ph.D., Chief Scientist and Managing Director, Science, Technology Assessment, and Analytics, at (202) 512-6888 or personst@gao.gov.

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SCIENCE AND TECHNOLOGY

Overview of GAO's Enhanced Capabilities to Provide Oversight, Insight, and Foresight

GAO provides a variety of science and technology (S&T) products and services to Congress. Over the decades, GAO has grown its S&T portfolio by adding technology assessments, engineering/project controls best practices guides, and, most recently, the Science & Tech Spotlight series. Together, these products are designed to address key congressional interests on S&T issues by providing foresight on the consequences of advances in S&T, oversight of the federal S&T enterprise and S&T-centric programs and projects, and insight into emerging issues and topics of congressional interest.

GAO has the expertise, independence, and access to data to provide authoritative, nonpartisan advice to Congress in a manner that complements other sources of S&T advice.

- **Expertise:** GAO's new Science, Technology Assessment, and Analytics (STAA) team has 59 staff members with masters' degrees and/or doctorates, as of November 2019. Fifty-six staff members have at least one degree in a science, technology, engineering, and mathematics field. GAO's technology assessments are informed by appropriate S&T expertise, including external experts across academia, think tanks, and industry. GAO integrates subject and policy knowledge from across its 15 mission teams to develop rigorous methodological approaches to expertly analyze quantitative and qualitative data.
- **Independence:** GAO has a robust quality assurance framework to help ensure its independence and has congressional protocols to help ensure GAO is responsive to Congress in a nonpartisan manner.
- **Access to data:** GAO's legal authorities grant it unique access to an extensive range of agency information and data, including classified information and other information that is not available to the public.

GAO will continue to build its capacity to respond to congressional demand. STAA's current staff level is about one-half of what was outlined in the April 2019 plan submitted to Congress. GAO's key S&T activities are shown in the figure below.

Key Science and Technology Activities in GAO

Technology Assessment

Provides foresight on key technologies and the policy implications for the federal government.

Innovation Lab

Explores, pilots, and deploys advanced analytics, information assurance auditing, and emerging technologies to improve auditing practices.



Evaluations

Oversight of research programs, cybersecurity, defense, intellectual property protection, health care, and all other science and technology functions of government.

Engineering Sciences

Provides best practices, including for cost, schedule, earned value, and technology readiness assessment.

Source: GAO. | GAO-20-306T