

**Written Testimony of Zach Graves, Head of Policy, Lincoln Network  
Before the Select Committee on the Modernization of Congress  
September 28, 2021**

Chair Kilmer, Vice Chair Timmons, and members of the Committee:

Thank you for the opportunity to testify. This year marks the 100<sup>th</sup> anniversary of the nonpartisan Government Accountability Office. Over its history, GAO has provided critical support to Congress through its audits, legal opinions, program evaluations, technology assessments, and other activities. Despite the tremendous taxpayer benefits provided by GAO, the agency’s capabilities have been unable to keep pace with the growth of federal government programs and expenditures. Additionally, while it has made progress in some areas, it has not fully embraced opportunities for modernization and innovation.

GAO’s work provides essential “oversight, insight, and foresight” that supports Congress’s legislative and oversight functions. For instance, GAO experts are routinely called to testify at hearings or to serve as detailees on committees, and its recommendations routinely shape agency actions and inspire legislation.

GAO provides a direct and tangible value for taxpayers. Over the past two decades, GAO’s work resulted in more than \$1.1 trillion in savings, as well as over 25,000 other government improvements. For more than a decade, GAO’s return-on-investment has exceeded \$100 in financial benefits for each dollar of its budget. Despite this impressive record, GAO’s authorities, tools, and staffing capacity have not kept pace with the massive growth of the executive branch.

GAO and Congress could do more to ensure that its nonpartisan recommendations are implemented in a timely manner to yield billions in additional taxpayer savings and yield greater government efficiencies. Moreover, GAO's growing science and technology capabilities can close longstanding gaps in congressional

expertise and ensure that the legislative branch can effectively carry out its constitutional responsibilities.

In the next section, I will evaluate how GAO's role has evolved over time. Subsequently, I will discuss GAO's technology assessment capabilities and assumption of OTA's mission. I will then make specific recommendations about improving GAO's science and technology capabilities, followed by additional recommendations about improving GAO writ large. Importantly, these recommendations should not be taken as a comprehensive list of potential GAO reforms.<sup>1</sup>

## **HOW GAO'S ROLE HAS EVOLVED**

Over its hundred-year history, GAO's mission, authorities, and strategic focus have evolved significantly. The nation's top watchdog was established as the "General Accounting Office" in the Budget and Accounting Act of 1921.<sup>2</sup> This legislation, signed into law by President Warren G. Harding, moved the office of the comptroller and its auditors (along with their powers and duties) out of the U.S. Treasury Department.<sup>3</sup>

Coming out of the New Deal era and heading into World War II, growing federal programs and expenditures placed significant new demands on GAO. By the end of the war, GAO had grown to nearly 15,000 staff. Recognizing it would have to take a new approach, the next few decades saw GAO move away from its "green eyeshade" era of accounting-focused work and towards program evaluation. This meant shifting its workforce strategy from low-level accounting clerks to

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<sup>1</sup> There are a number of important issues facing GAO that are not addressed here, such as tensions between GAO and the executive branch, government contracting, etc.

<sup>2</sup> The "General Accounting Office" became the "Government Accountability Office" in 2004, reflecting its broader mission and strategic focus on program evaluation and foresight.

<sup>3</sup> While it was structured to be independent of the executive branch, it wasn't until several decades later, in the 1940s, that the agency would be codified as part of the legislative branch.

specialized professionals.<sup>4</sup> By the late 1960s, GAO began recruiting more individuals trained in non-accounting fields, including economics, science, and technology.

With the backdrop of an unpopular war in Vietnam and the aftermath of the Watergate scandal, this period also saw Congress reassert its Article I powers. This included advancing reforms such as the Legislative Reorganization Act of 1970, increased funding for staff capacity, and the creation of two new congressional agencies: the Congressional Budget Office and the Office of Technology Assessment (OTA). These reforms, and new agencies, were meant to help rebalance Congress's information asymmetry with the executive branch.

Coming out of the Cold War denouement and heading into the 1990s, Congress downsized GAO. This followed direct criticism of the agency as well as across-the-board cuts to congressional funding as part of the "Contract with America" that propelled Republicans to take the House of Representatives in 1995. This new majority slashed resources for committees and support agencies, and eliminated OTA's funding. Today, GAO's staff remains 37 percent smaller than it was in 1990.<sup>5</sup>

## **SCIENCE & TECHNOLOGY ASSESSMENT AT GAO**

Since Congress defunded OTA in 1995, Members of Congress have undertaken numerous efforts to reestablish its function.<sup>6</sup> These include an early attempt to relocate it to CRS (opposed by then Librarian of Congress James Billington), a bipartisan proposal by Reps. Rush Holt and Amo Houghton to build it as an

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<sup>4</sup> Jonathan Walters and Charles Thompson, "The Transformation of the Government Accountability Office: Using Human Capital to Drive Change," IBM Center for the Business of Government, July 2005.

<sup>5</sup> See: <https://www.whitehouse.gov/omb/historical-tables/>.

<sup>6</sup> See: "[Legislative History of Technology Assessment in the US](#)," Future Congress.

independent office in GAO,<sup>7</sup> and various other proposals to change its authorizing statute.

Among congressional support agencies, GAO was clearly the closest match for housing OTA's mission. Both agencies had a lot in common. They each produced rigorous multi-disciplinary analytic products that could take a year or more to complete, they both primarily served committees (particularly following GAO's formalization of its congressional protocols),<sup>8</sup> and had overlap between the kinds of reports they would do. In hearings leading up to OTA's creation in the late 1960s, Congress even considered building it within GAO from the start.<sup>9</sup> In this context, GAO was an obvious vehicle for proponents of bringing back OTA.

Congress directed the establishment of a technology assessment pilot inside GAO in 2001. It was made permanent in 2008. In January 2019, following Senate appropriations report language, GAO elevated this program and established the Science, Technology Assessment, and Analytics (STAA) mission team. Over the past few years, STAA has grown from 49 FTE to over 100. STAA's work has also extended beyond the scope of OTA's mission, including developing innovative new approaches to oversight—such as real-time auditing—through its Innovation Lab. The ongoing support of Comptroller General Gene Dodaro has played a key role in this expansion.

## **RECOMMENDATIONS TO STRENGTHEN SCIENCE & TECHNOLOGY AT GAO**

In late 2019, a congressionally-directed report by the National Academy of Public Administration recommended that STAA be the primary vehicle for assuming OTA's mission, and that it be given additional resources to develop its capabilities. The NAPA report also echoed long-standing concerns about STAA's ability to

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<sup>7</sup> See: <https://www.congress.gov/bill/108th-congress/house-bill/4670>.

<sup>8</sup> See: <https://www.gao.gov/products/gao-17-767g>.

<sup>9</sup> See: <http://archive.gao.gov/t2pbat19/134346.pdf>.

navigate the culture and bureaucracy of its parent agency.<sup>10</sup> This highlights that there are still major challenges facing STAA. These include defining its own culture within GAO's bureaucracy, building its reputation in the broader S&T community, and building relationships in Congress with key offices and committees.

Absent a restoration of OTA, STAA can also be made more OTA-like. This would also address its critics, recognizing that its unique S&T foresight mission requires a different approach than other GAO mission teams.

In support of expanding STAA's programmatic role, I recommend the following reforms:

- **Give STAA greater research independence by mirroring the relationship between CRS and the Library of Congress:**<sup>11</sup> Several experts have noted that a key challenge for GAO's technology assessment team will be overcoming the cultural and bureaucratic hurdles of its parent agency. The statutory relationship between the Library of Congress and the Congressional Research Service offers one solution to this problem, providing a measure of programmatic independence without unnecessarily duplicating administrative functions.
- **Give STAA greater administrative independence by clarifying its authorities:** STAA should be provided with clear authorities to do its own hiring and acquisitions<sup>12</sup> and with maximum practicable independence from other teams within GAO. While GAO's careful and risk-averse culture may be appropriately calibrated for an audit-focused organization, they are

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<sup>10</sup> See:

<https://napawash.org/academy-studies/science-and-technology-policy-assessment-for-the-us-congress>.

<sup>11</sup> See: 2 U.S.C. § 166 (b)(2).

<sup>12</sup> Such as for information technology and contract services.

not conducive to a nimble science and technology office or the Innovation Lab's IT needs.

- **Give STAA an appropriations line item:** Because STAA's mission and needs are significantly different from the audit-oriented work of its parent organization, it is important for Congress to have a more granular viewpoint into those functions. Similar to CRS and the Library of Congress, STAA could be given a separate appropriations line item within the GAO budget, as well as be expected to provide to appropriators a separate congressional budget justification, where it would explain how it intends to spend appropriated funds it has requested. This would have the benefit of giving Congress increased visibility into STAA's operational development, and make STAA more OTA-like.<sup>13</sup>
- **Establish a Congressional Technology Assessment Board:** Modeling on OTA's Technology Assessment Board (TAB), STAA should establish a bipartisan, bicameral advisory board to establish closer relations with Congress and to provide guidance on incoming congressional requests on science and technology. The board could include Senators and Representatives from key committees (or their designees), and the CRS director and head of the National Academies as non-voting members.<sup>14</sup> Unlike OTA's TAB, a GAO-affiliated board should be advisory in nature.
- **Create a Chief S&T Advisor to Congress:** Congress should create a new Senate-confirmed position in GAO to oversee STAA and interface with Members of Congress on S&T matters. This role could also expand STAA's

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<sup>13</sup> Some critics may argue a line item would make it more likely for STAA to share the fate of the former OTA. But, in practice, appropriators have numerous options to cut discretionary programs.

<sup>14</sup> This might include the House and Senate Appropriations committees; the Senate Committee on Commerce, Science, and Transportation; the House Committee on Science, Space, and Technology; the House Committee on Energy and Commerce; et al.

horizon-scanning capacity, coordinate different S&T resources for Congress, and find new strategies to promote absorptive capacity.

The following programmatic recommendations offer modest improvements to enhance STAA's effectiveness:

- **Give STAA an office in the Capitol:** Communications and congressional engagement are key challenges for STAA. Establishing an office in the Capitol Building will make it easier for STAA to engage directly with Members and their staff, and provide services such as briefings and consultations.
- **Give STAA its own website:** To help address its communications challenges, GAO should create a separate website for technology assessments and S&T spotlights, and also expand content for the Innovation Lab's [gaoinnovations.gov](http://gaoinnovations.gov). GAO should also coordinate the creation of an enhanced S&T resources portal on each chamber's intranet, coordinating with CRS, the National Academies, and other relevant entities.
- **Coordinate congressional S&T briefings:** STAA should lead efforts, in coordination with CRS and the National Academies, to coordinate regular briefings for Members of Congress and their staff on emerging science and technology issues. This could also include training workshops at the beginning of each Congress.
- **Encourage GAO to self-initiate more technology assessments:** GAO has the ability to undertake work not directly tied to congressional requests through the Comptroller General's authority (CGA). Given the need for horizon scanning—to anticipate and study emerging issues before they are active policy debates—STAA should incorporate into its strategy a larger share of CGA-initiated reports, working with experts on its advisory board

(of which I'm a member) or the National Academies. Like CRS's periodic report updates, STAA should consider continuously updating technology assessments on major S&T issues (e.g. artificial intelligence).

- **Undertake a Participatory Technology Assessment Pilot:** STAA should undertake a participatory technology assessment pilot, which would incorporate citizen-participation methods developed in Europe.<sup>15</sup> Such a model could provide unique and valuable insights to Members of Congress about their constituents' views on emerging technology issues.

### **ADDITIONAL RECOMMENDATIONS TO STRENGTHEN GAO**

The following are ways that Congress could increase and leverage GAO's positive contribution to the oversight and the legislative process:

- **Fully-fund GAO to maximize its return on investment:** Based on the agency's recent ROI estimates, additional funding for GAO could yield as much as \$100 in savings for each additional dollar appropriated, while giving the agency flexibility to make new investments in information technology and its Innovation Lab, which has the potential to modernize government oversight and significantly improve federal agency operations. Consideration should be given to restoring GAO's funding as a percentage of the federal budget to its levels prior to the cuts in the mid-1990s (a substantial increase), also shifting its costs from the legislative branch budget (which is consistently resource-constrained) to a share of overall federal discretionary spending.
- **GAO should better prioritize its own IT infrastructure:** In its self-reported measure of internal operations for 2020, GAO reports only 69

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<sup>15</sup> See:

<https://ecastnetwork.org/research/reinventing-technology-assessment-for-the-21st-century/>.

percent staff satisfaction with its “IT Tools,” despite rolling out a range of new tools. Other projects, such as the struggling web publishing program, New Blue,<sup>16</sup> suggest broader challenges with implementing IT modernization. We applaud GAO for recognizing this problem and suggest the committee support GAO improving how it provides its staff with modern tools, and cutting through red tape to advance innovative technical solutions.

- **Congress should require the Comptroller General to provide annual estimates of the cost to the government of recommendations that is has recommended but agencies have yet to implement:** As of September 20th,<sup>17</sup> GAO had more than 4,600 open recommendations including nearly 500 “priority recommendations” which GAO states “warrant priority attention from head of key departments or agencies because their implementation could save large amounts of money” or yield other significant nonfinancial benefits.<sup>18</sup> Congress could use this information to inform its legislative and oversight work to improve agencies' performance.
- **Congress should require GAO to set deadlines for its recommendations and publicly track agencies' progress implementing these recommendations.** This would inform Congressional oversight and hold agencies accountable to the public for government improvements. As of 2020, GAO reported that 77 percent of its recommendations are implemented within four years, but only half are implemented after two.<sup>19</sup>
- **Congress could require GAO to provide legislative options to each congressional committee to address priority open recommendations**

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<sup>16</sup> See: <https://www.gao.gov/products/oig-21-1>,

<sup>17</sup> See: <https://www.gao.gov/reports-testimonies/recommendations-database>.

<sup>18</sup> See: <https://www.gao.gov/products/gao-21-591pr>.

<sup>19</sup> See:

<https://www2.deloitte.com/us/en/insights/topics/analytics/text-analytics-and-gao-reports.html>.

**and related work from its high-risk areas to jumpstart bipartisan legislative activity based on nonpartisan oversight:** GAO's recommendations often provide a bipartisan starting point for legislative reform that both political parties can support. Requiring GAO to present legislative options annually to each congressional committee for addressing priority open recommendations or high-risk areas could jumpstart bipartisan legislative efforts to address the nation's most pressing challenges.

## **CONCLUSION**

Over its hundred-year history, GAO has been a critical institution for policy formation and oversight within the federal government, eliminating wasteful inefficiencies, and driving significant value for taxpayers. With the availability of new technology tools such as machine learning, cloud software, and access to machine-readable government data, GAO has a monumental opportunity to modernize for the next century, and advance a vision to systematically transform Congress's ability to understand and oversee federal programs in real time.

Over its history, GAO has shown that it can embrace change and reorient itself to new challenges. Presently, GAO's bias towards the status quo risks depriving it of significant opportunities to stay relevant and maximize future taxpayer savings. Foundationally, as we move into the future, we must recognize that risk aversion in this domain is itself a massive risk.

These are complex and difficult questions with many nuances. I look forward to the important work of this committee in helping address them, and I thank you for the opportunity to testify.