

March 4, 2020

**Dan Lips, Director of Cyber and National Security, Lincoln Network  
Testimony before the U.S. House of Representatives, Legislative Branch Appropriations**

Chairman Ryan, Ranking Member Herrera Beutler, and Members of the Subcommittee:

Thank you for the opportunity to testify. My name is Dan Lips. I am the Director of Cyber and National Security with the Lincoln Network, a non-profit organization that serves as a bridge between Silicon Valley, other technology hubs, and national policymakers. I am here to testify in support of the Comptroller General's FY2021 budget request of \$706 million in appropriated funds (an increase of \$76 million over FY2020) to support 3,250 full-time equivalent positions (FTEs) for the Government Accountability Office (GAO).<sup>1</sup> Further, I urge the Subcommittee and Congress to provide necessary funding levels, resources, and hiring authorities to allow GAO to expand its Science, Technology Assessment, and Analytics (STAA) team.

To summarize, GAO is one of the best investments Congress makes on behalf of American taxpayers, and the Comptroller General's new STAA team has the potential to dramatically increase the value that GAO provides Congress and the nation. The STAA team will strengthen the Legislative Branch's capacity to understand complex scientific and technological issues and to better forecast and address emerging challenges—including cybersecurity threats to critical infrastructure and global health emergencies, such as the Coronavirus disease. Moreover, the STAA's planned use of data science and advanced analytics to enhance GAO's traditional auditing process has the potential to create billions in new taxpayer savings.

Congress should also leverage GAO's enhanced capabilities to address issues of bipartisan concern and drive governmentwide improvements, such as preventing improper payments. For example, Congress passed a law in 2010 requiring GAO to annually report on duplication across federal agencies and programs.<sup>2</sup> GAO reported that its annual duplication reports have yielded \$262 billion in financial benefits since 2011.<sup>3</sup> Directing GAO and its STAA team to consistently apply its new data science capabilities to enhance its auditing work in focused ways to identify waste, fraud, and abuse has the potential to achieve significant savings.

**GAO's FY2021 Budget Request in Historical Context**

The Comptroller General proposed a 12 percent increase over FY2020 funding levels.<sup>4</sup> This may seem like a lot given the nation's fiscal challenges. But a review of historical data shows that this increase would only continue to rebuild GAO's reduced capacity from previous staffing levels. Moreover, additional funding would yield considerable government savings and improvements.

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<sup>1</sup> Gene L. Dodaro, "Fiscal Year 2021 Budget Request," Testimony Before the Subcommittee on the Legislative Branch, Committee on Appropriations, House of Representatives, February 27, 2020.

<sup>2</sup> Government Accountability Office, "Opportunities to Reduce Potential Duplication in Government Programs, Save Tax Dollars, and Enhance Revenue," GAO-11-318SP, March 2011.

<sup>3</sup> Government Accountability Office, "2019 Annual Report: Additional Opportunities to Reduce Fragmentation, Overlap, and Achieve Billions in Financial Benefits," GAO-19-285SP, May 2019.

<sup>4</sup> Gene L. Dodaro.

GAO’s request includes funding 3,250 FTEs, an increase of 50 positions.<sup>5</sup> To put this into historical context, GAO had more than 5,000 employees thirty years ago.<sup>6</sup> GAO’s workforce size has fallen by 1,800 employees since that time and is now two-thirds its staffing level in 1991.

Despite operating at a reduced capacity since the 1990s, GAO has a track record of delivering significant government savings and program improvements over the past 20 years. A review of GAO’s self-reported annual estimates of savings, government improvements, and return on investment (ROI) since 1999 shows that GAO’s work has resulted in more than \$1.1 trillion in taxpayer savings and more than 25,000 other improvements. See Table 1.

**Table 1—GAO Reported Savings, Government Benefits, and Annual ROI (FY1999-2019)**

FY Year	Reported Savings <i>(billions of \$)</i>	Other Government Benefits	Estimated Annual Return-on-Investment (\$)
1999	20.1	607	57
2000	23	788	61
2001	26.4	799	69
2002	37.7	906	88
2003	35.4	900	78
2004	44	1,000	95
2005	39.6	1,400	83
2006	51	1,342	105
2007	45.9	1,354	94
2008	58.1	1,400	114
2009	43	1,300	80
2010	49.9	1,361	87
2011	45.7	1,318	81
2012	55.8	1,440	105
2013	51.5	1,314	100
2014	54.4	1,288	100
2015	74.7	1,286	134
2016	63.4	1,234	112
2017	73.9	1,280	128
2018	75.1	1,294	124
2019	214.7	1,418	338
Totals	1,183.3	25,029	

Source: Data are from GAO’s annual reports since FY1999, which are available at GAO.gov.

GAO’s annual ROI has been more than \$100 in savings for each taxpayer dollar invested in GAO every year since 2012. Moreover, GAO’s average annual ROI between 2011 and 2018

<sup>5</sup> Id.

<sup>6</sup> Brookings Institution, “Congressional Staff and Operating Expenses,” at: <https://www.brookings.edu/wp-content/uploads/2019/03/Chpt-5.pdf> (February 26, 2020).

was \$126 compared to an average of \$84 between 1999 and 2010. (The former average does not include GAO's estimated \$338 ROI reported for 2019, which was significantly higher than past years. GAO stated that these historic savings were due to \$136 billion in savings related to a DOD weapon system procurement and a \$24.2 billion reduction in student loan costs.<sup>7</sup>)

What happened at the beginning of the last decade that increased GAO's annual return on investment in the years that followed? One change is that Congress required GAO to issue annual reports on governmentwide duplication beginning in 2011. In 2010, former Oklahoma Senator Tom Coburn (full disclosure: my boss from 2011 to 2015) passed an amendment to the debt limit increase to require GAO's annual duplication reports. As of 2019, GAO estimates that its annual reports and work on duplication have yielded \$262 billion in financial benefits since 2011.<sup>8</sup> This shows how Congress's strategic direction can leverage GAO's impact.

### **The Opportunity Costs of Unimplemented (or Slowly Implemented) Recommendations**

GAO's impressive track record achieving savings and other benefits for the government should lead Congress and the American public to consider what additional benefits could be achieved if the Comptroller General had more resources. How much more taxpayer savings could the government have realized had GAO been operating with a staff equal to its 1990 levels? How much more efficiently could the government be operating?

One way to begin to answer these questions is to look at agencies' track record implementing GAO's recommendations. In 2019, GAO reported that its four-year implementation rate was 77 percent for its 2015 recommendations,<sup>9</sup> which is similar to prior years. Further, GAO reported that its cumulative implementation rate for FY2015 recommendations was 21% after year one, 40% after year two, 56% after year three, and 77% by year four.<sup>10</sup> This four-year implementation rate is significant because GAO reports that "our experience indicates that recommendations remaining open after a four-year period are generally not implemented in subsequent years."<sup>11</sup>

GAO currently has 4,958 open recommendations including 422 "priority recommendations."<sup>12</sup> According to GAO's 2019 report on duplication, "billions of additional dollars could be saved," if Congress and executive agencies implement open recommendations identified within that report alone.<sup>13</sup> GAO does not quantify the full scope of potential savings or government benefits that could be realized if all 4,958 recommendations were implemented. But we can speculate that the savings and improvements would be considerable. Growing GAO's staffing and capacity would likely result in additional recommendations, as well as enhanced engagement with Congress and federal agencies to increase and expedite their implementation.

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<sup>7</sup> U.S. Government Accountability Office, "Performance and Accountability Report: Fiscal Year 2019," GAO-20-1SP, November 2019, at: <https://www.gao.gov/assets/710/702715.pdf> (February 25, 2019).

<sup>8</sup> GAO-19-285SP.

<sup>9</sup> GAO-20-1SP.

<sup>10</sup> Id.

<sup>11</sup> Id.

<sup>12</sup> GAO, "Recommendations Database," (data as of February 9, 2020), at: <https://www.gao.gov/reports-testimonies/recommendations-database> (February 25, 2019).

<sup>13</sup> GAO-19-285SP.

## **The Potential Value for the Legislative Branch to Expand GAO’s Science, Technology Assessment, and Analytics (STAA) Team**

With this context, the Comptroller General testified that additional funding will be used in part to grow the STAA team. He stated that current and new appropriations will be used to increase the STAA team from its current level of 100 positions to 140 positions in FY2021. Further, he stated that the STAA would focus on several priorities, including conducting technology assessments and providing other scientific and technical assistance to Congress, improving oversight of major acquisitions, technology, and science programs, and advancing GAO’s use of data science and analytics in its auditing.<sup>14</sup> All of these priorities will yield significant value for Congress.

### *Improving Congressional Science and Technology Capacity*

Enhancing Congress’s science and technology capacity is a recognized issue of bipartisan concern. The Congressionally mandated National Academy of Public Administration report issued in November recommended developing GAO’s STAA as part of the solution to enhance Congressional capacity for science and technology. The House Select Committee on the Modernization of the Congress’s bipartisan recommendations include “[r]eestablishing and restructuring an improved Office of Technology Assessment.”<sup>15</sup> In a report for Harvard University’s Ash Center for Democratic Governance and Innovation, Lincoln Network’s Zach Graves and Demand Progress’s Daniel Schuman recommend a hybrid approach to improve Congressional S&T capacity—including reestablishing the OTA while developing GAO’s capacities and specializations. “GAO’s STAA unit has shown significant competence in building its technology assessment capacity,” Graves and Schuman write, “It should continue to take on a significant portion of OTA’s original mission.”<sup>16</sup>

As Congress considers whether to reestablish the OTA, the STAA is well positioned to play a lead role in enhancing Congress’s capacity. As the Comptroller General testified on Thursday, the need for science and technical capacity are so great that building capacity within both Congress and GAO is appropriate. The STAA will help Congress understand, analyze, and forecast major issues involving science and technology (such as risks related to cybersecurity threats and global pandemics), as well as develop legislation and conduct oversight to address these challenges with greater independence. The STAA will also provide valuable technical assistance evaluating federal research and development investments.

### *Improving Oversight of Federal Technology, Acquisitions, and Science Programs*

Strengthening GAO and the Legislative Branch’s ability to oversee major technology, acquisitions, and science programs will improve government performance and national security. For example, GAO has identified federal information security and cybersecurity as a high-risk issue since 1997. GAO has warned that the DOD’s \$1.6 trillion acquisition program is a high-risk issue. A 2019 GAO report identifying the Defense Department’s supply chain risk

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<sup>14</sup> Id.

<sup>15</sup> The Select Committee on the Modernization of Congress, U.S. House of Representatives, “Recommendations.”

<sup>16</sup> Zach Graves and Daniel Schuman, “Science, Technology, & Democracy: Building a Modern Congressional Technology Office,” Harvard University for Democratic Governance and Innovation, 2020.

management as a high-risk area served as a catalyst for reform within DOD. GAO's past oversight of major DHS science and technology programs have helped end or reform ineffective programs and acquisitions. GAO's work has also informed Congress and the executive branch about the need to rethink the nation's approach to managing risk. Monitoring agencies' acquisitions programs presents a significant challenge for Congress, particularly when those programs involve science and technology. Growing the capacity within GAO to oversee technology, acquisitions, and science will help Congress better fulfill its Article I responsibilities and strengthen national security.

### *Using Data Science and Advanced Analytics to Strengthen GAO Auditing*

The STAA team's plan to apply data science and advanced analytics to enhance GAO's traditional auditing work will modernize and improve GAO's role in Congressional oversight in significant ways. GAO's Chief Data Scientist Taka Ariga recently explained to me how the STAA plans to use data analytic: "The nexus of scalable computational power and innovative data science techniques enables analyses based on 100% of the data instead of a more traditional, sample-based approach. In turn, we can accelerate the speed and depth at which we identify, consume, and act on patterns, behaviors, correlations, and anomalies."<sup>17</sup>

Applying data science has the potential to revolutionize oversight. For example, imagine if the federal government was able to use similar kinds of analytics that banks use to monitor consumers' credit card transactions. GAO estimates that governmentwide improper payments have totaled \$1.4 trillion since 2003, when Congress required agencies to begin reporting them. GAO reports that "federal entities estimated about \$141 billion in improper payments" in FY2017.<sup>18</sup> Potential savings from using data analytics and continuous oversight to monitor and prevent improper payments could exceed tens of billions of dollars per year.

Beyond achieving savings and eliminating waste, fraud, and abuse, applying data science and advanced analytics to government oversight could help Congress address other issues of bipartisan concern, such as identifying root causes of the opioid overdose epidemic and human trafficking, by analyzing multiple data sets and identifying patterns across government programs.

### **Conclusion**

Thank you again for the opportunity to testify. Understanding the nation's fiscal challenges, I urge the Subcommittee to recognize the potential long-term value of investing in expanding GAO's capacity and particularly the STAA team to strengthen Congress's scientific and technical capacity and to improve federal oversight. The Subcommittee and Congress should also embrace its role and power of the purse to hold federal agencies accountable to implement GAO's recommendations and answer the Comptroller General's information requests.

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<sup>17</sup> "Modernizing Oversight to Improve Government Efficiency and Performance," Lincoln Network, November 25, 2019.

<sup>18</sup> GAO, "Reducing Government-wide improper payments," 2020.