



441 G St. N.W.
Washington, DC 20548

July 6, 2022

The Honorable Gerald E. Connolly
Chairman
Subcommittee on Government Operations
Committee on Oversight and Reform
House of Representatives

Technology Modernization Fund Hearing: Responses to Questions for the Record

Dear Chairman Connolly:

Thank you for the opportunity to testify before the Subcommittee on May 25, 2022, to discuss the Technology Modernization Fund. We also appreciate the opportunity to provide the Subcommittee with additional information in response to questions for the record. Our responses can be found in the enclosures to this letter.

If you have any questions, please contact me at (214) 777-5719 or hinchmand@gao.gov.

Sincerely yours,

David B. Hinchman
Acting Director, Information Technology and Cybersecurity

Enclosures - 2

cc: The Honorable Jody Hice, Ranking Member
Subcommittee on Government Operations

Enclosure I

Questions for David Hinchman
Acting Director, Information Technology and Cybersecurity
Government Accountability Office

Questions from Chairman Gerald E. Connolly
Subcommittee on Government Operations

May 25, 2022, Hearing: "Technology Modernization Fund: Rewriting Our IT Legacy"

- 1. Are there reasons why the Technology Modernization Fund (TMF) Board might choose to invest in proposals that may not yield explicit cost savings? What are some of those types of investments?**

The TMF was established to improve information technology and enhance cybersecurity across the federal government. As part of its selection criteria, the Technology Modernization Board considers whether an agency clearly demonstrates in its proposal how the proposed project would generate cost savings or how the modernization of the system would dramatically improve the quality of the service provided. Additionally, beginning in June 2021, the TMF funding guidelines began to prioritize projects that cut across agencies and which address immediate cybersecurity gaps, improve the public's ability to access government services, and modernize and support priority agency assets and services. Such investments could provide value, but would not necessarily result in direct cost savings.

Enclosure II

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Questions from Ranking Member Jody Hice

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- 1. Of the first 11 Technology Modernization Fund (TMF) awards issued, GAO noted that most projects had unreliable cost estimates, leading to the concern that these savings may not come to fruition. Are the cost estimates unreliable because of a failure on the part of the applicant to provide accurate data, or is it a failure on the part of the Technology Modernization Board (Board) for not sufficiently auditing the veracity of the data provided by agencies in their applications?**

Of the 11 projects that we have reviewed, 10 had cost estimates that we found to be unreliable. All 10 projects had insufficient support for one or more of these four characteristics: comprehensive, well documented, accurate, and credible. Since these 10 proposals were submitted, the General Services Administration (GSA) has addressed our recommendation to post clear guidance on what cost estimating process agencies are to follow. However, GSA has not fully addressed our recommendation to develop detailed guidance to help ensure the accuracy and completeness of agencies' submissions. Absent detailed guidance from the TMF Program Management Office on how to complete the cost estimate template, including information on the data elements and the required fields, agencies are at risk of continuing to provide incomplete or insufficient information in their project proposals.

- 2. Given the poor cost estimates and unrealized savings of the first 11 TMF awards, it is likely that this trend will continue with the projects awarded out of the \$1 billion appropriated in the American Rescue Plan in 2021. It is also likely that OMB's relaxed TMF award repayment requirements provided in its 2021 TMF funding guidance means that projects may not have to repay the entire project amount.**

- a. How concerned should Congress be about the potential loss of reimbursements to the TMF?**

Because we have not yet reviewed any awards made under the revised repayment requirements, we have not studied any potential impact resulting from a loss of reimbursements. However, the amount that agencies are required to repay to the fund could potentially affect the amount that is available in the fund for future awards.

- b. What does this mean to the solvency of the TMF?**

Similar to our response to the previous question, we have not studied any potential impact to the solvency of the fund.

Enclosure II

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3. To what level of detail has GAO been able to audit the approximately 23 awards made thus far through the TMF?

To date, we have reviewed the 11 approved projects made by the TMF between the program's inception in 2017 and the end of August 2021. Specifically, we obtained and analyzed TMF project proposal documentation and signed written agreements and interviewed officials in charge of TMF-funded projects within the Office of the Chief Information Officer (OCIO) and other appropriate offices at each of the seven agencies that received awards. We also analyzed the documentation from the 11 projects to determine the scheduled reimbursement transfers and fee payments.

To conduct this work, we analyzed the 11 TMF project proposals, including cost estimates and supporting documentation. We compared each TMF-funded project team's estimating methodologies and documentation to the best practices of a reliable cost estimate discussed in GAO's *Cost Estimating and Assessment Guide*. Our analysis enabled us to determine whether each project's cost estimate, used to determine the project's cost savings estimate, was comprehensive, well documented, accurate, and credible.

Further, we also obtained and analyzed contract documentation for each of the 11 projects awarded funds through August 2021. Specifically, we obtained and analyzed contract documentation for the 11 projects that awarded contracts or issued task orders for work on the projects. Additional detailed information on the objectives, scope, and methodology for our prior work can be found in our two issued reports.¹

Reviews of the awards made since September 2021 are planned to be included in our next required report, which is to be issued by December 2023.

a. What information does GAO need to conduct a comprehensive review of the TMF?

The provisions commonly referred to as the *Modernizing Government Technology (MGT) Act* included a requirement for us to report biannually on the TMF and on projects that have been awarded TMF funds.² We have issued two

¹GAO, *Technology Modernization Fund: OMB and GSA Need to Improve Fee Collection and Clarify Cost Estimating Guidance for Awarded Projects*, [GAO-20-3](#) (Washington, D.C.: Dec. 12, 2019); and *Technology Modernization Fund: Implementation of Recommendations Can Improve Fee Collection and Proposal Cost Estimates*, [GAO-22-105117](#) (Washington, D.C.: Dec. 10, 2021).

²*Modernizing Government Technology* provisions of the *National Defense Authorization Act for Fiscal Year 2018*, Pub. L. No. 115-91, div. A, title X, subtitle G, § 1078(b)(7)(B), 131 Stat. 1283, 1591 (2017).

Enclosure II

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reports to address the specific aspects of this mandate, in December 2019 and December 2021. Both reports shared three objectives, which were to: (1) determine the costs of establishing and overseeing the TMF, as compared to the savings realized by projects that have received awards; (2) assess the extent to which cost savings estimates for awarded projects are reliable; and (3) determine the extent to which agencies have used full and open competition for any acquisitions related to the awarded projects. Additionally, our December 2021 report also reviewed the status of the TMF and projects that have received awards. In both reports, we obtained sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives.

While we believe that our biannual reviews provide a comprehensive review of the TMF, we would welcome further conversation as to other areas our work might address.

b. How would you describe the level of transparency around the TMF decision-making process?

The TMF website includes a high level overview of the process used to determine which solutions are funded by the TMF. Additionally, our December 2019 and December 2021 reports both contain a description of the decision-making process, as described to us by TMF officials. However, this detailed information is not available on the TMF website. Additionally, our past work has not reviewed the extent to which the Technology Modernization Board uses this process for determining project awards.

c. Would it be beneficial if TMF applications, reimbursement agreements, schedules and status were made public?

The TMF website includes information on awarded projects, including the project status, repayment status, and scheduled time or cost overruns, if any. However, it does not include information on the reimbursement agreements, or the scheduled timeframes for completion. Making this information publicly available could enhance oversight of the TMF by providing additional insight into the board's decision-making process, as well as project status.

4. How can the public and Congress track the flow of TMF project payments to agencies and associated repayments back to the fund?

The TMF website includes information on awarded projects, including the project status, repayment status, TMF investment amount, and how much TMF has spent to date. However, it does not include information on the amount of repayments back to the fund,

Enclosure II

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which could assist the public and Congress on tracking the flow of the TMF project payments. It does not appear that this information is otherwise publicly available.

- a. How are TMF project payments to agencies and resulting repayments to the fund made publicly available on USAspending.gov, if at all?**

The *Digital Accountability and Transparency Act of 2014* (DATA Act) requires federal agencies to submit spending data for presentation on USAspending.gov, including funding for contracts, grants, loans, insurance, and direct payments.³ As such, USAspending.gov does not include information on TMF project payments to agencies or agency repayments to the TMF.

- b. How could the visibility of such financial information be enhanced on USAspending.gov? Please identify any legal, policy, or technical challenges.**

Based on the stated purpose of USAspending.gov (as established in the DATA Act), which does not include financial transfers between agencies, expanding the information available through the TMF website likely provides the best existing opportunity to provide greater visibility on financial transaction information related to the TMF.

- 5. In his testimony, Mr. Gary Washington, USDA CIO, described a "Farmer's.gov" USDA project that was awarded \$10 million in 2018. In 2020, the project was modified downward with \$6 million of the investment returned to the TMF. According to Mr. Washington's testimony, "the project was closed out prior to implementation in May 2021 because we found the project not ready for further development."**

- a. Given the post-TMF award determination that the project was not ready for further development, why did the Board fail to foresee that the project would not be successful?**

The Farmers.Gov Portal project was originally intended to update and modernize the conservation financial assistance and payment operations at the Farm Services Agency and Natural Resources Conservation Service in order to improve the services through the portal. The scope of the project was reduced in August 2020 after the Department of Agriculture's leadership determined that additional unplanned process re-engineering would be required prior to further development of the technology solution for common enrollment processes for the

³Pub. L. No. 113-101, 128 Stat. 1146 (2014).

Enclosure II

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May 25, 2022, Hearing: "Technology Modernization Fund: Rewriting Our IT Legacy"

two agencies. While the project developed tools to help reduce manual data entry, and developed a proof of concept for the system, the project was closed out prior to implementation in May 2021.

- b. In prior reports related to the TMF, GAO has reported that some agency projects have narrowed their scope, which has led to reduced award amounts being transferred to agencies. Please provide the Committee with an updated list of all agency projects approved by the Board that were modified or stopped before completion or are at risk of not moving forward to completion.**

As of August 31, 2021, six of the initial seven awarded projects had requested and received Technology Modernization Board approval for significant reductions to their approved scope. Any additional changes to agency projects made since August 2021 will be addressed in the next GAO report, which is to be issued by December 2023.

- c. With regard to the modified TMF awards, please identify for the Committee, to the extent possible, how the modification of these agency projects might impact the level and quality of services as compared to what was presented in agency applications when they were approved by the Board.**

In our December 2021 report, we noted that approximately 85 percent of the initial round of approved projects had narrowed their scopes and that this led to reduced award amounts transferred to agencies. Specifically, as of August 31, 2021, six of the first seven awarded projects with significant reductions to their approved scope resulted in these projects requiring \$46.92 million less in funding. Although we have not analyzed the specific impacts of these changes on the projects' planned level and quality of services, any reduction in a project's scope runs the risk of adversely affecting planned goals and objectives. Given the hundreds of millions of dollars remaining in the fund to address urgent IT modernization challenges, the post-award changes to past projects, and the delays in realizing savings, it is increasingly important that the quality of the documentation provided by applicant agencies be complete, accurate, and reliable.

6. How does GAO define a legacy IT system?

- a. Does a consistent, government-wide definition for a legacy IT system exist in the U.S. Government? If not, what are the policy implications for not having a consistent approach?**

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The MGT Act defines a legacy IT system as one that is outdated or obsolete.⁴ Additionally, in our June 2019 report on agencies' IT modernization plans for critical legacy systems, we identified several attributes associated with a legacy IT system, including its initial year of implementation, date of oldest hardware, software support status, and use of legacy programming languages.⁵

- b. How could the public and Congress find such information on the IT Dashboard, if at all? Please include any recommendations for how the IT Dashboard could be improved to better highlight legacy IT systems that are in need of reform or classified as at risk.**

While the IT Dashboard does not specifically identify legacy IT systems, the website does identify agencies' future plans for major IT investments, including for modernization. Further, the IT Dashboard identifies the amount of agency spending on the operations and maintenance of existing IT investments, including legacy systems.⁶

In addition, in June 2022, GSA issued guidance for budget year 2024 that calls for agencies to identify whether the TMF finances projects for major IT investments.⁷ The guidance also calls for agencies to identify risks for major IT investments including technology and security risks.

- c. What is the relation between legacy IT systems and High Value Assets?**

In December 2018, the Office of Management and Budget (OMB) issued a memorandum that provided guidance regarding the establishment and enhancement of the High Value Asset program.⁸ It stated that the program is to be operated by the Department of Homeland Security (DHS) in coordination with

⁴ Pub. L. No. 115-91, Div. A, Title X, Subtitle G, § 1076(8), 131 Stat. at 1587 (2017).

⁵GAO, *Information Technology: Agencies Need to Develop Modernization Plans for Critical Legacy Systems*, [GAO-19-471](#) (Washington, D.C.: June 11, 2019).

⁶Each year, the federal government spends more than \$100 billion on IT and cyber-related investments. Of this amount, agencies have typically reported spending about 80 percent on the operations and maintenance of existing IT investments, including legacy systems.

⁷GSA, *BY 2024 IT Collect Submission Overview v2*, (Washington, D.C.: June 2022).

⁸OMB, *Strengthening the Cybersecurity of Federal Agencies by Enhancing the High Value Asset Program*, M-19-03 (Washington, D.C.: Dec. 10, 2018). This memorandum rescinded the previous guidance on High Value Assets, M-16-04 and M-17-09.

Enclosure II

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Subcommittee on Government Operations

May 25, 2022, Hearing: “Technology Modernization Fund: Rewriting Our IT Legacy”

OMB. The guidance required agencies to identify and report these High Value Assets (which may include legacy systems), assess the assets for security risks, and remediate any weaknesses identified, including those associated with obsolete or unsupported technology.⁹ However, the guidance does not require agencies to identify and report this information for all legacy systems. Until OMB requires agencies to do so, the federal government will continue to run the risk of continuing to maintain investments that have outlived their effectiveness.

7. What do you believe is the intent of the TMF and the purpose of the MGT Act? As currently administered by the Board, is the intent of the MGT Act being met?

The MGT Act established the TMF to improve information technology and enhance cybersecurity across the federal government.¹⁰ To that end, the TMF currently prioritizes project awards that fall into four categories: modernizing high priority systems, improving cybersecurity, supporting public-facing digital services, and enabling cross-government collaboration and scalable services. However, as we testified in May 2022, OMB and GSA need to continue to strengthen agencies’ applications for award funding, and to ensure that these proposals adequately capture planned project scope and cost.¹¹ By taking these actions, OMB and GSA can help better position the TMF as a useful tool for addressing critical IT modernization needs across the federal government.

⁹According to OMB’s December 2018 guidance, an agency may designate federal information or an information system as a High Value Asset when one or more of these categories apply to it: (1) the information or information system that processes, stores, or transmits the information is of high value to the federal government or its adversaries; (2) the agency that owns the information or information system cannot accomplish its primary mission essential functions within expected timelines without the information or information system; and (3) the information or information system serves a critical function in maintaining the security and resilience of the federal civilian enterprise.

¹⁰Pub. L. No. 115-91, Div. A, Title X, Subtitle G, § 1078(b)(1), 131 Stat. at 1589 (2017).

¹¹GAO, *Technology Modernization Fund: Past Awards Highlight Need for Continued Scrutiny of Agency Proposals*, [GAO-22-106054](#) (Washington, D.C.: May 25, 2022).