Testimony of Margie Graves

before the

Subcommittee on Cybersecurity, Information Technology and Government Innovation

Chairwoman Mace, Ranking Member Brown, and distinguished members of the Subcommittee on Cybersecurity, Information Technology and Government Innovation-

I am Margie Graves, the former Deputy Federal Chief Information Officer (CIO) for the Office of Management and Budget (OMB) and Deputy CIO for the Department of Homeland Security (DHS), and a Fellow of the National Academy of Public Administration (the Academy). Established in 1967 and chartered by Congress, the Academy is an independent, non-profit, and non-partisan organization dedicated to helping leaders address today's most critical and complex challenges.

Thank you for the opportunity to submit testimony to you today regarding Unlocking Government Efficiency through IT Modernization. I was happy to see the reintroduction of the Modernizing Government Technology (MGT) Reform Act last week. Our conversation today will focus on how to build on the foundation of the original MGT Act and enhance our approach through the MGT Reform Act to ensure future success.

The federal government has long struggled to address technical debt that exists within the legacy system portfolio. There is bipartisan agreement that transforming technology systems and infusing current technology into government platforms is key to mission delivery, customer experience, and efficient operations across all departments and agencies. Yet, the adoption rate for new technologies is slower than needed and transformations have not proceeded apace.

There are several barriers to transformation that came into focus when considering the possible reasons for this lack of traction. Among those are lack of a committed and reliable multi-year funding stream to provide certainty and a baseline on which to execute, gaps in technology talent necessary for execution of transformation programs, complicated and lengthy procurement processes, and insufficient ability to leverage rapidly evolving technologies in the commercial marketplace. It is these barriers that the original MGT Act was intended to address.

The vision for the MGT Act was to create a multi-year funding mechanism in the form of the governmentwide Technology Modernization Fund that would be available for transformation projects which met specific criteria from a business case standpoint and provided significant value to the government in terms of enhanced cybersecurity, improved customer experience, citizen service delivery, and efficiency of operations. The approach was modeled after venture capital firm operations, and discussions were held with corporate partners to gather information on their approach. The criteria for the selection of projects that the TMF would support mirrored those used by such firms. Key criteria included clear articulation of the impact that the transformation would have on the mission, demonstration of having the elements of project execution in place including a solid acquisition strategy and technical talent, appropriate analysis of technologies that would be "fit for purpose" for the project, and a plan with milestones showing delivery and financial return on investment. The TMF revolving fund was intended to become self-sustaining over time, as selected projects provided a ROI.

Even when baseline selection criteria are met, additional preference is given to projects that address common governmentwide issues where multiple departments and agencies can benefit from an "proof of concept" approach. For example, many organizations are choosing to refactor old legacy code and move to cloud environments for improvement of mission and enhanced cybersecurity. Early in the life cycle of the TMF, the Department of Housing and Urban Development executed a project that updated the code of five critical business systems to JAVA and moved these systems to a cloud environment. HUD subsequently provided a playbook and lessons learned to assist other agencies taking the same path.

Similarly, additional preference is given to projects that adopt and leverage the commercial marketplace for shared services as a means of operational improvement and financial efficiency. As a companion piece to aid agencies in achieving shared services adoption, OMB issued a memo, M-19-16 "Centralized Mission Support Capabilities for the Federal Government" and worked with GSA to charter Quality Service Management Offices (QSMOs) in the areas of cybersecurity, financial management, grants management and human resources. The QSMOs were charged with developing standards, best practices, and commercial marketplaces in these areas. One of the earliest examples of a shared service adoption supported by the TMF was the Department of Energy consolidation and migration of sixty-four separate email systems, forty-five of which were on premise, to a unified cloud service. As an example, since the establishment of the Grants QSMO, adoption of shared services has increased from 19% to 48% of federal awarding agencies. To further help agencies, the Grants QSMO created the Catalog of Market Research consisting of commercial grants IT vendors vetted by a cross-government team to support

agencies in selecting the most optimal grants management solution. One of the earliest examples of a shared service adoption supported by the TMF was the Department of Energy consolidation and migration of sixty-four separate email systems, forty-five of which were on premise, to a unified cloud service, reducing costs and enhancing the ability of the department to communicate with all employees.

In addition, additional preference is given to those proposals that enhance the performance of a mission that is jointly executed by multiple departments and agencies and sometimes includes businesses and the general public. There are many missions that fit this description. In my former agency, the Department of Homeland security, a couple of examples come to mind. Within DHS there is a portfolio of "systems of systems" that support a horizontal end-to-end business process serving the mission of screening individuals and cargo for travel and trade to identify and reduce risk of possible terrorist activity. This mission is jointly executed with two primary partners, the Department of Justice (check against outstanding criminal wants and warrants) and the Department of State (checking VISA status). Common platforms and shared services are critical to the ability to share information and adjudicate decisions in real time so that legitimate travel and trade will not be disrupted, while security of our borders is protected. Also, the disaster recovery mission requires coordination between DHS and other agencies such as HUD and the Small Business Administration to provide housing options and reconstitutes businesses. These examples provide an illustration of why it is necessary to take a horizontal portfolio view of mission transformation proposals viewed through the lens of end-to end execution, unencumbered by organizational boundaries.

As the former Deputy CIO for DHS, I was pleased to see several proposals from DHS meet these stringent criteria including DHS' Homeland Security Information Network (HSIN) modernization. DHS' HSIN is an information sharing platform that played a pivotal role during the COVID-19 pandemic, supporting vaccine distribution and operations through the coordination of hundreds of organizations. The increased demand during this response placed increasing demands on the system that could not be easily met, causing mission degradation. With TMF funds, the system was modernized into a cloud environment where it could scale to meet a demand surge. There are also two separate proposals from Customs and Border Protection where TMF funds are being used to modernize systems that support better management of border security and enhance collection of trade revenue. The first is the Southwest Border Technology Integration Program, a program where Southwest Border processing involves multiple DHS components and partner agencies, that were operating on independent data systems with many key handoffs still taking place with paper files. The TMF funds are being used to integrate these systems/data and fully automate the process. The second is the modernization of the Automated

commercial environment collections module which will help CBP improve customs enforcement, revenue collections, and trade protections, which will result in long-term benefits to the agency, partner government agencies, the trade community, and the American public. The significance of this project is paramount in enabling lawful international trade, especially during this dynamic trade environment.

In conclusion, the MGT Act and the TMF have demonstrated success in this first cycle, but there is much more to do as we move forward. The enhancements proposed in the Modernizing Government Technology (MGT) Reform Act will continue to move the needle as we accelerate the use of the TMF to transform government missions by leveraging current technologies. The technologies available today are even more game-changing. Artificial intelligence (AI) can now be used to refactor or create code at lightning speed. AI can be used to find anomalies in cyber activity and help to identify intrusions and protect systems. It can be used to identify anomalous activities in our benefits systems to identify and guard against fraud and improper payments. FinOps capabilities are an integral part of many current platforms, allowing for optimization of the use of technology and the reduction of costs. Quantum computing exists today and further innovation is on the horizon. The opportunity for progress is real and the TMF is one tool that will address barriers and help the federal government accelerate adoption.