TECHNOLOGY MODERNIZATION FUND: REWRITING OUR IT LEGACY

HEARING

BEFORE THE

SUBCOMMITTEE ON GOVERNMENT OPERATIONS

OF THE

COMMITTEE ON OVERSIGHT AND REFORM

HOUSE OF REPRESENTATIVES

ONE HUNDRED SEVENTEENTH CONGRESS

SECOND SESSION

MAY 25, 2022

Serial No. 117–83

Printed for the use of the Committee on Oversight and Reform

Available at: *govinfo.gov*,
oversight.house.gov or
docs.house.gov

COMMITTEE ON OVERSIGHT AND REFORM

CAROLYN B. MALONEY, New York, *Chairwoman*

ELEANOR HOLMES NORTON, District of Columbia
STEPHEN F. LYNCH, Massachusetts
JIM COOPER, Tennessee
GERALD E. CONNOLLY, Virginia
RAJA KRISHNAMOORTHI, Illinois
JAMIE RASKIN, Maryland
RO KHANNA, California
KWEISI MFUME, Maryland
ALEXANDRIA OCASIO-CORTEZ, New York
RASHIDA TLAIB, Michigan
KATIE PORTER, California
CORI BUSH, Missouri
SHONTEL M. BROWN, Ohio
DANNY K. DAVIS, Illinois
DEBBIE WASSERMAN SCHULTZ, Florida
PETER WELCH, Vermont
HENRY C. "HANK" JOHNSON, JR., Georgia
JOHN P. SARBANES, Maryland
JACKIE SPEIER, California
ROBIN L. KELLY, Illinois
BRENDA L. LAWRENCE, Michigan
MARK DESAULNIER, California
JIMMY GOMEZ, California
AYANNA PRESSLEY, Massachusetts

JAMES COMER, Kentucky, *Ranking Minority Member*
JIM JORDAN, Ohio
VIRGINIA FOXX, North Carolina
JODY B. HICE, Georgia
GLENN GROTHMAN, Wisconsin
MICHAEL CLOUD, Texas
BOB GIBBS, Ohio
CLAY HIGGINS, Louisiana
RALPH NORMAN, South Carolina
PETE SESSIONS, Texas
FRED KELLER, Pennsylvania
ANDY BIGGS, Arizona
ANDREW CLYDE, Georgia
NANCY MACE, South Carolina
SCOTT FRANKLIN, Florida
JAKE LATURNER, Kansas
PAT FALLON, Texas
YVETTE HERRELL, New Mexico
BYRON DONALDS, Florida
VACANCY

RUSSELL ANELLO, *Staff Director*
WENDY GINSBERG, *Subcommittee on Government Operations Staff Director*
AMY STRATTON, *Deputy Chief Clerk*

CONTACT NUMBER: 202-225-5051

MARK MARIN, *Minority Staff Director*

SUBCOMMITTEE ON GOVERNMENT OPERATIONS

GERALD E. CONNOLLY, Virginia, *Chairman*

ELEANOR HOLMES NORTON, District of Columbia
DANNY K. DAVIS, Illinois
JOHN P. SARBANES, Maryland
BRENDA L. LAWRENCE, Michigan
STEPHEN F. LYNCH, Massachsetts
JAMIE RASKIN, Maryland
RO KHANNA, California
KATIE PORTER, California
SHONTEL M. BROWN, Ohio

JODY B. HICE, Georgia *Ranking Minority Member*
FRED KELLER, Pennsylvania
ANDREW CLYDE, Georgia
ANDY BIGGS, Arizona
NANCY MACE, South Carolina
JAKE LATURNER, Kansas
YVETTE HERRELL, New Mexico

(II)

C O N T E N T S

Written opening statements and statements for the witnesses are available on the U.S. House of Representatives Document Repository at: docs.house.gov.

INDEX OF DOCUMENTS

The documents are available at: docs.house.gov.

TECHNOLOGY MODERNIZATION FUND: REWRITING OUR IT LEGACY

_____

Wednesday, May 25, 2022

House of Representatives
Committee on Oversight and Reform
Subcommittee on Government Operations
Washington, D.C.

The subcommittee met, pursuant to notice, at 10:11 a.m., 2154 Rayburn House Office Building, and via Zoom; the Hon. Gerald Connolly (chairman of the subcommittee) presiding.

Present: Representatives Connolly, Norton, Davis, Sarbanes, Lawrence, Lynch, Raskin, Khanna, Porter, Brown, Biggs, Keller, Clyde, Mace, LaTurner, and Herrell.

Also present: Representative Hoyer.

Mr. CONNOLLY. The hearing will come to order. I welcome everyone to this hearing which seeks to explore ways to make the Technology Modernization Fund more effective and helpful to agencies in need of modernized IT.

Before we begin the hearing, the chair recognizes the distinguished majority leader for a statement, Mr. Hoyer.

Mr. HOYER. Mr. Chairman, first I very much appreciate you allowing me to participate in this hearing. But as I was reading my testimony this morning in my office, I wanted to make a statement, because this is the first public hearing I have been to since the tragedy in Uvalde.

At Sandy Hook 20 children lost their lives, and six adults. In Parkland, multiple teens lost their lives as well as teachers. In Uvalde, 19 children and two adults.

Chris Murphy, Mr. Chairman, on the Senate floor yesterday pleaded with his colleagues to work with us to find a way to pass laws that make this less likely. We all know we cannot pass laws to make it impossible or never happen again. But certainly we have a responsibility to the people of this country, to our constituents, the children, the parents, whether they lose their lives in a grocery store in the state of New York or in a small town not too far from San Antonio. They deserve our attention and response to try, to the extent we can, prevent things happening like this.

How many more times will our Senate Republican colleagues express outrage at horrific shootings like the one today in Uvalde, Texas, and then sadly block meaningful bipartisan background check legislation, supported by 9 out of 10 Americans? And most responsible gun owners support that legislation as well.

How many more times, how many senseless, tragic deaths must occur until we abandon moments of silence and substitute life-

(1)

saving action? How many children will we lose to high-capacity guns and hate and evil mass killers before we act?

Mr. Chairman, we need to be the agents of God to answer the prayers of the grieving. Prayers are important. I believe in prayer. But I also believe that God's work here on Earth, as John Kennedy said, must be our own, because God works through us. We, who have been given great responsibility and authority by our neighbors and have been elected to Congress must respond, as I said, to those grieving now in Texas, and who grieved in New York, and who grieved in Parkland, and who grieved in Sandy Hook, and who have grieved in too many countless incidents like the one we have sadly seen yesterday. We need to see an America that does not have more mass killings than any other nation.

Mr. Chairman, I wanted to say that because we ought to not allow anybody to think that we have not forgotten and focused on these tragedies, and that we will respond, and that, as Chris Murphy, Senator Murphy, who represents Parkland, pleaded, he was not actually on bended knee, but he said he would be on bended knee, plead for responsible action. Prayers and moment of silence are appropriate, but they are not enough.

Thank you, Mr. Chairman.

Mr. CONNOLLY. I thank the distinguished majority leader and I join him in his thoughts and sentiments. I recall I was chairman of Fairfax County when the Virginia Tech massacre occurred, and at that point that had been, that was the largest gun massacre in American history. Unfortunately, it no longer holds that record.

In the next week, in my county, we buried six young people, and I still am in touch with the families of the victims. And we try to make meaning out of this horror. We tried to turn the terrible sorrow into productive action. But the loss is irredeemable. There is no replacement for that loss, even with action and advocacy.

At some point the madness must end in America, and action must be taken.

My daughter is in Australia. I talked to her last night about this massacre in Texas, and Australia had a string of massacres as well, but they did something we have not done, which was to take action. And they have seen a plummet in gun violence and deaths by gun and mass shootings in Australia. There is efficacy in action. There is continued madness in inaction.

I thank the distinguished majority leader for joining us this morning. Our parliamentarians tell me that we need to make sure you are legit this morning, even though I think you are. So, without objection we reaffirm what we already did, which is to waive the distinguished majority leader onto the subcommittee for the purpose of participation this morning. Without objection, it is so ordered.

And I now recognize myself for an opening statement.

Legacy IT systems, systems that are outdated or unsupported, plague our Federal agencies. These systems prevent the Federal Government from effectively providing small businesses the financial and technical support they need. They hamper the ability of veterans to access their benefits and delay the Internal Revenue Service from getting millions of Americans their tax refunds.

Each year, the Federal Government spends more than $100 billion on information technology and cyber-related investments. Unfortunately, 80 percent of that funding is dedicated just to maintaining aging systems. These relic IT systems present exorbitant maintenance costs, vulnerable cybersecurity postures, and unacceptable encounters for customers seeking assistance from Federal agencies. Increasingly, many of them use language that is no longer taught in technology courses in campuses around the United States.

Years of inspector general and Government Accountability Office reports find that many Federal agencies IT modernization projects are at risk of failure, cost overruns, schedule slippages, and sometimes they lack disciplines and effective management and program oversight and governance. So, Congress is faced with aging Federal IT across the government and a suspect track record on projects designed to modernize that IT.

That is why, in 2017, I worked with my Republican counterparts to establish the Technology Modernization Fund, a fund engineered to reimagine and transform the way Federal agencies invest in modern, nimble technology. We sought to reimagine how government could and should deliver services to the American people.

The TMF offers agencies an opportunity to secure and consistent and flexible funding stream, enabling once impossible multiyear investments in sweeping, complex, and transformative IT projects. The TMF is designed to provide agencies assistance in their modernization efforts, quote, "At every stage of the proposal development process, from initial concept development to final award," unquote, providing technical acquisition and financial assistance and oversight throughout project execution.

This subcommittee is the locus of IT oversight in the U.S. Congress, and today we seek to make sure that the tool Congress created five years ago to assist agencies to build systems that deliver vital government services is, in fact, working.

Additionally, it is roughly one year since we secured a historic $1 billion investment in the TMF. Today we want to check and make sure that TMF's leadership is seizing on that opportunity to restore trust in government by making Federal IT systems work for customers. We must guarantee that TMF enables quicker, more secure, and more efficient service delivery to individuals, families, and businesses.

Since the Technology Modernization Fund's inception, the program has funded 23 projects across 14 Federal agencies. Out of those 23, only two experience schedule delays, and not a single project resulted in a cost overrun.

For example, after the Department of Labor digitized its labor certification process, the agency was able to issue 176 percent more agricultural labor certifications and 109 percent non-agricultural labor certifications, allowing small businesses to hire essential temporary employees to meet the demands of the market throughout the pandemic. In addition, these investments built IT that facilitated immediate digital access to those certifications so that farmers and other employers could avoid costly trips they formerly had to take to sign and mail documents.

If properly planned for and scoped, all TMF investments share this promise of reducing costs, improving security, and facilitating better engagements with the individuals who rely on us.

Monday's announcement of a $9.1 million TMF award to the National Archives and Records Administration is another example of the promise of this technology. That funding comes after months of bipartisan oversight work to reduce a years-long backlog of paper-based records that veterans need to demonstrate their eligibility for disability, pension, and other benefits. In fact, Mr. Hice, our ranking member, and I worked together, sending a letter with many of our colleagues that made the National Archives aware of this opportunity for funding.

I look forward to continuing oversight in that award and to make sure NARA gets this right and that our veterans receive the services they have so richly earned.

Mr. Washington, a witness here today, and CIO of the Department of Agriculture also received a TMF investment on Monday for supply chain risk response. I look forward to hearing more about that project from him later in the hearing. Congratulations, Mr. Washington, on what marks the fourth TMF project you secured for your agency.

TMF is one tool that agencies can use to fund IT modernization outside of the annual appropriation process, and the program is proving incredibly successful, so successful, in fact, that demand is wildly outpacing resources. As we will hear from our witnesses today, the board has received 130 proposals from 60 agencies and agency components, totaling more than $2.5 billion. Agencies want to get it right, and Congress ought to provide them with the resources and support to help them because it is an investment with a payoff.

As part of our oversight work today we also want to examine ways to improve the operations of the TMF. We want to hear more from GSA about how it will prioritize which projects to fund and how they determine the repayment requirements for each of those projects.

We also have heard concerns from agencies and other stakeholders that TMF can sometimes be slow to examine and fund proposals, causing delays for critical projects. If you look at the screen you will see a bar graph of TMF appropriations and funding allocations. The two-toned bar with the diagonal line shows that despite an influx of funding and a year's worth of time, the fund still has $756 million yet to be awarded.

We know that administrators have made efforts to expand the work force and support teams, but we are still hearing frustrations about the length of time it takes to get TMF funding to agency recipients. Because of these delays, Congress did not provide the TMF with additional funding in the 2022 omnibus appropriations bill, pointing to the money still not obligated or spent.

During this hearing, I hope to better understand how we can improve the funding application process and streamline it and what additional resources and authorities the TMF Board and Program Management Office might need to help that along.

I am proud to have played a part in securing a revolutionary $1 billion investment in the TMF through the American Rescue Plan

in March of last year. I also support President Biden's 2023 budget request for an additional $300 million. These investments will not be enough, over time, given the heavy demand that we face.

I know that everyone on the dais is interested and committed to ensuring that we have a 21st century Federal Government that is fully equipped with up-to-date IT that is secure, on behalf of our constituents, and I intend to press Congress and Federal agencies to keep doing just that.

With that I recognize Mr. Biggs, sitting in for the distinguished ranking member, for his opening statement. Mr. Biggs.

[Pause.]

Mr. CONNOLLY. I think you are on mute, Mr. Biggs.

Mr. BIGGS. I was, and that was my best statement so far in his hearing.

Mr. CONNOLLY. And let the record show I did try to make sure you remained aware of the fact that you were mute.

Mr. BIGGS. I appreciate that. Thanks, Mr. Connolly. Thanks for holding this hearing.

I hope you will allow me just a brief moment, as you did to the majority leader and yourself, with regard to a matter that is not on our agenda today, and that is with the shooting that took place yesterday in Uvalde.

In my mind it is more than a tragedy. This is the result of a violent, evil person with malice in his heart, and who reportedly wanted to kill his own family members. This is something that we all look at with horror. We all look at it with self-reflection. We all look at it with measured thoughts and ideas. I would hope that I am not hearing people try to politicize this thing at this point. That debate can take place at a more appropriate time, at a more appropriate location, and in a different setting, perhaps, a different hearing.

But nonetheless, we deal with this. Our thoughts and prayers do go out to those who were harmed. Our gratitude goes to the first responders who went in and charged and attacked, trying to save lives. These are things that happened that need to be resolved. No one likes them, we all abhor them, and we all condemn them, and I hope that instead of politicizing this we actually raise our tone and our dialog to look at the societal causes that may perpetuate these types of evil acts.

And so, Mr. Chairman, I want to move now to talk about the Government Technology Act and the subject of today's hearing.

The original purpose, or the intention of this looks like it was that the TMF find modernization projects, create savings, and that agencies use those savings to pay the TMF back so that additional projects could get funded. And if agencies want to fund other types of projects that they move through the appropriations process. So, what we see is OMB sometimes looks like they are taking a completely different direction from the initial intention here.

The Modernizing Government Technology Act, the legislation that created the TMF, attempts to address three problems: one, many Federal information technology systems are outdated; two, there is insufficient progress modernizing them; and three, the Federal budget process is ill-suited to the rapid change of IT needs and technological solutions.

Last month's subcommittee hearing on the IRS gave two prime examples of how these problems persist. The IRS is still using a paper-based system to process certain tax returns which has led to unacceptable delays that have harmed millions of taxpayers. In addition, we have heard discussion of the IRS's customer account data engine project, which began in 1999, and has experienced numerous delays and still has no end in sight.

The TMF was heralded as a step forward for IT modernization. It set up an alternative to the existing Federal budget process to allow specific focus on and for responsiveness to IT modernization needs. In concept, the TMF was set up to be an efficient cycle. It would fund projects to retire aging systems which are expensive to operate and maintain, and then the savings realized by those agencies by retiring those systems would be used to reimburse the TMF and allow for additional IT modernization projects.

But that does not seem to be happening. A small number of project awards have been made, and of those it is unclear where any have documented savings at all. It is also unclear whether IT modernization as it pertains to retiring legacy systems is the primary focus of the TMF today, and it ought to be.

Committee Republicans are pleased to see the recent announcement that TMF funding would go toward the National Archives and Records Administration's effort to digitize veterans' records. That equates to retiring a legacy, paper-based system. While the law does give latitude in the projects eligible for funding, recent awards exhibited a focus on other priorities such as customer experience and cybersecurity. It is not that those projects are not important, but they do point to a shift away from the savings-based model intended in the law.

In addition, the MGT statute required agencies to reverse TMF awards at a rate adequate to maintain solvency of the TMF. It also required a fee to cover operations expenses of the TMF. But in its May 2021 guidance regarding the funds provided for the TMF in the American Rescue Plan, OMB announced it would relax reimbursements requirements requiring partial or even minimal repayments. Not only did reimbursement requirements facilitate additional IT projects, they also required agencies to carefully consider the projects they submitted for TMF dollars. By reducing reimbursements on a widespread basis, these benefits will be lost.

For this subcommittee to perform oversight, we need access to the written agreements between agencies and the Technology Modernization Board to include reimbursement requirements, schedules, and status. In fact, these agreements should be publicly available. Taken together, the lack of savings, reduced reimbursements, and the types of project awards point to a TMF that is altogether different from what the law intended and what the law requires.

This subcommittee needs to understand whether the Biden administration intends for the TMF to be a slush fund for IT priorities. We also need to understand why the TMF model has not worked well up to this point, or if it is even viable for making a significant impact on Federal IT modernization needs. Are reimbursements being required, and if so, are agencies making their payments, fully and timely?

Mr. Chairman, thank you for calling this hearing. I think it is an important topic, and I look forward to further discussion today and the testimony of the witnesses, and I yield back.

Mr. CONNOLLY. Thank you, Mr. Biggs.

The chair now happily recognizes the distinguished majority leader for any statement he may wish to make. Mr. Hoyer.

Mr. HOYER. Thank you very much, Mr. Chairman. Let me say at the outset I agree with many of the things that Mr. Biggs has said, and I think it shows that we need to think about this in a thoughtful way and a way that was intended and is still intended to operate. And I want to congratulate Chairman Connolly for his leadership on this issue.

This is not a sexy issue. We do not have thousands of press people here covering this. No television is covering this. Because it sort of like do we need to fix the roof this year or wait 2 or 3 years to do it? But it is a critically important and substantive issue, I think as Mr. Biggs pointed out and agrees with, for us to get the kind of modernization speed and resources that we need to make sure that we are not undermined by our technology but served by our technology.

So, I thank you very much and I thank Ms. Young and Mr. Washington and Mr. Hinchman for being here with us.

Five years ago, Democrats and Republicans came together to enact the Modernizing Government Technology Act. That legislation included a bill I had introduced and worked on with then President Obama that first proposed the Technology Modernization Fund. It was a model from the private sector, from then-Federal CIO, chief information officer, Tony Scott, who had used it successfully at Microsoft.

So, this is not a government solution. This was a solution that was brought to us from one of the most successful companies in the world to be applied so that we could stay current with our technology. It represented a new way to create urgency, expertise, and funding to modern Federal technology.

Republicans were in the majority then and I commend them for working with me, with the Administration, with the late Chairman Elijah Cummings, with Chairman Connolly, with Representatives Kelly and Khanna, with other Democrats to get it done. We worked closely with Leader McCarthy. The leader and I were partners in this effort, Mr. Connolly, as you will recall, because we both worked with you, and, of course, we worked with Representative Chaffetz, and, of course, very importantly, Congressman Hurd.

Congressman Hurd played a particularly important role in pursuing this important issue, and I was pleased to work with him on it. That is how Congress ought to be, both parties working together to get things done. As I said, I think the ranking member or the representative of the ranking member gave a thoughtful statement on what some of the challenges are, what some of the problems are, and what we ought to be doing.

We all recognize the importance of upgrading outdated technology systems across the Federal Government. We understood that Federal agencies cannot effectively serve the American people using 20th century technology, period. Such systems are costly, break down often, and are more vulnerable to cyber threats from

Russia and from other adversaries. So, this is a national security issue as well as it is an efficiency issue.

The Technology Modernization Fund that our legislation authorized was designed to be effective at funding big, systemic upgrades, not just small fixes. Now, five years later, that fund is up and running, capitalized with more than $1 billion that is already being put to use for the purposes it was intended. The fund has already supported, as has been pointed out, 23 projects at 14 different Federal agencies. These include upgrading the technology at the southwest border, rolling out zero-trust cybersecurity at numerous agencies, migrating numerous systems to the cloud, and digitizing veterans' records.

However, 60 agencies have applied with proposals for over 130 projects, which would require more than $2.5 billion in funding. We cannot afford, as a Nation, as a government, to ignore this need for greater cybersecurity, greater efficiency, and greater ability to deliver for the people.

I appreciate, Mr. Chairman, that this subcommittee remains focused on addressing the technology modernization needs of our government. I am not surprised that Congressman Connolly is in the leadership of this effort. He has run a very large, complex government in our country, and as a result understands how critically important this is to serving the people, to saving dollars, and to making sure that we are secure.

As you look today at the work of the Technology Modernization Fund, I hope you will ask two critical questions. First, how can we improve on its work through oversight, guidance, and perhaps targeted reforms that could help the fund be as effective and successful as possible? I think that is what Mr. Biggs was referring to and certainly Congressman Connolly has been in the leadership of attempting to do. Second, how can we ensure that it has the capitalization it requires to fulfill its mission of upgrading critical systems across our whole government and not just a handful of agencies?

I am an appropriator. I served on the Appropriations Committee for 23 years. I understand the concern that appropriators have about having annual appropriations so they can apply oversight to the use of the taxpayers' dollars. Having said that, however, what we have found is the appropriation process is too slow to respond in a way that we need to respond, and if the private sector responded as slowly as we did, they too would be out of date with their technology.

That was the whole purpose of the Obama Administration Mr. Scott proposed. When we first proposed the fund in 2016, then-Federal CIO Tony Scott, as I just said, told us that he thought it needed at least $3 billion to upgrade the most critical systems across the government. At that level he was confident we could recoup significant future cost savings and then revolve to continue supporting modernization projects across the Federal Government. And then revolve. This was intended to be, and continues, I think, to be a revolving fund where you have a corpus, a capital that is available for immediate draw-down, and through the appropriation process over time be reimbursed from the agency that used it, so that it would always be available with a significant corpus of funds for in-

vestment in the short term, which would be funded in the longer term. That may sound like a lot of money, $3 billion, and it is.

By the way, the Biden administration, in its first budget to the Congress, asked for $9 billion, which would have been the kind of trust fund that you would have needed that could revolve and be replenished. For context, though, the Federal Government is estimated to spend roughly $90 billion per year on technology, ten times the figure asked for, and 90 times what has been given. Much of that, however, is spent maintaining the status quo, that $90 billion, maintaining the status quo.

I was the chairman, Mr. Chairman, of the Treasury Postal Subcommittee Appropriations Committee when we put billions of dollars into IRS modernization, and we did not get it right. This is designed to try to get it right.

We were fortunate to get $1 billion, as the chairman has pointed out. I have talked about the appropriation process. In conclusion, I would hope we can explore ways to capitalize the fund fully, as intended, through annual appropriations and possibly future direct appropriations like we did in the American Rescue Plan, Mr. Chairman—and you were in the leadership of that, and I thank you very much for that—or potentially new funding models like agency contributions for shared services.

I look forward to hearing the testimony of the witnesses here today, especially TMF Executive Director Raylene Yung from the General Services Administration. I want to thank GSA Administrator Robin Carnahan for her focus on this issue. I have talked to her on the phone, as I think Ms. Yung knows, and in person, in my office, about the importance of this project, and her focus on this project, we are advantaged by the fact that we have a GSA administrator who understands the importance of this modernization effort.

I hope this subcommittee will continue to shine a light and keep a watchful eye on the critical work of the fund and join the chorus of voices urging an increase in its capitalization in Fiscal Year 2023 and beyond. This is not a partisan issue. This is an issue of whether or not we are going to be able to serve the people in the 21st century with a government that is transparent, efficient, and has cost savings built into it.

Thank you, Mr. Chairman.

Mr. CONNOLLY. I want to thank the majority leader. Gosh, you are a regular participant in this subcommittee's work, and I think we need to make you an honorary, permanently waived member, despite what the parliamentarian says. But I really do thank you for it because, you know, it is interesting, if a website goes down with an important program it is headline news. If there is a major data breach in the Federal Government, headline news. But God forbid there be a single member of the press at a hearing to discuss legislation and programs designed to avert that.

I know the attention span is limited in Washington, but it does say volumes about the lack of detailed interest in trying to actually come to bipartisan solutions to make things work. And IT has to work, and as you indicated, Mr. Hoyer, this subcommittee has a long history of bipartisanship.

I mean, Darrell Issa and I wrote FITARA, 6, 7 years ago now. You know, Mr. Hurd collaborated with myself and Robin Kelly on all kinds of things. Mr. Meadows and I collaborated on FedRAMP and all kinds of IT solutions legislatively, and Mr. Hice has worked with us, as the ranking member now of the subcommittee on a number of IT initiatives as well. You know, it can be done, and as you said, Mr. Hoyer, this is not a partisan issue, and must never become one or we are lost.

So, this is definitely common ground full of promise, and I thank you so much for your leadership, and especially for getting it about the Technology Modernization Fund. As you will recall, not once but twice it was zeroed out, zeroed out, and we had to fight, and with your leadership we were successful in restoring $1 billion. But it would have been zero, which I think would have been catastrophic as we move forward in a pandemic and in a post-pandemic world to try to recover.

So, your leadership means so much and thank you so much for being here today.

I would now like to introduce our witnesses. Our first witness for today is the Chief Information Officer of the U.S. Department of Agriculture, Mr. Gary Washington. Our next witness will be the Acting Director of Information Technology and Cybersecurity for GAO, Mr. David Hinchman. And finally, we will have the Executive Director of the Technology Modernization Fund, about which we have been talking, Ms. Raylene Yung.

And the witnesses, if you would all please stand and raise your right hand. It is our practice to swear in witnesses before this committee and subcommittee.

Do you swear or affirm that the testimony you are about to give is the truth, the whole truth, and nothing but the truth, so help you God?

Ms. YUNG. I do.

Mr. WASHINGTON. I do.

Mr. HINCHMAN. I do.

Mr. CONNOLLY. Let the record show that the witnesses have answered in the affirmative. Thank you so much. Without objection, your full written statements will be made a part of the record.

With that, Mr. Washington, you are recognized for five minutes of testimony. Welcome.

STATEMENT OF GARY WASHINGTON, CHIEF INFORMATION OFFICER, U.S. DEPARTMENT OF AGRICULTURE

Mr. WASHINGTON. Thank you, Chairman Connolly, Ranking Member Hice, and members of the subcommittee for the opportunity to update you today on the United States Department of Agriculture's use of the Technology Modernization Fund. I would also like to thank you for your ongoing support and commitment to improve information technology management and funding across the Federal Government.

The U.S. Department of Agriculture touches the lives of every American through its mission to provide leadership on agriculture, food, natural resources, rural infrastructure, nutrition, and related issues through fact-based, data-driven, and customer-focused deci-

sions. It is critical that we have the technology infrastructure to support all of these efforts.

Central to that goal is focusing on enterprise-based approaches to management and decisionmaking and the cost savings and efficiencies that result. With a work force of about 100,000 employees managing a $200 billion per year budget, USDA works to ensure a modern and efficient organization that delivers programs with integrity and efficiency. It also does this through cohesive and strategic decisions and implementation of programs to minimize shallow approaches.

The USDA annual IT budget has been $2.5 billion to $2.8 billion over the last three years, with a projection of over $3 billion for Fiscal Year 2024. As we continue to meet the complex, day-to-day requirements, work to strengthen our cybersecurity needs to address new and emerging threats to the Department's systems and customer information, as well as respond to unfunded tasks such as those covered under Executive Order 14028, which include implementation of zero-trust requirements, we rely on other sources such as the TMF to continue with our IT mission requirements and mandates. This has allowed us to plan and implement critical efforts such as our capital planning enterprise architecture, data analytics, and geospatial efforts, which have been underfunded.

OCIO has worked to increase the consistency in IT functions and services of the Department which has resulted in consolidation of end user and data center services for the Department. USDA has been the recipient of four TMF investments, and we are appreciative of the opportunity to talk about them today.

The farmers.gov project, awarded in 2018 for $10 million, was intended to update and modernize the conservation and financial assistance and payment operations at the Farm Service Agency and Natural Resources Conservation Service, to improve the services through portal. The scope of the project was updated in August 2020, after the agency determined that additional process re-engineering would be required prior to further development of the technology solution for common enrollment processes for the two agencies, so $6 million of the investment money was returned to the TMF.

While the project developed tools to help reduce manual data entry and develop a proof of concept for the system, the project was closed out prior to implementation in May 2021, because we found the project not ready for further development, as we first needed to harmonize policies and data and effect process changes prior to applying the technology. The repayment is in process, and the final two repayment transfers are on track to be paid to GSA for $1.9 million will occur in Fiscal Year 2022 and 2023, respectively.

The Infrastructure Optimization/Watershed project awarded in 2018 for $500,000 enabled Farm Production and Conservation to complete the migration of its Enterprise Watershed Program application to commercial cloud, complete its authority to operate and release the application to production on time. The cloud migration enables more effective response for local communities to respond to natural disaster strikes such as those from flooding and soil erosion. The tools enable a more rapid processing and declaration of a local watershed emergency and thus accelerate government re-

sponse and reduce the response time of Federal Government in watershed events driven by floods, fires, and windstorms. Repayment for this project has been completed.

The Specialty Crops System Modernization project was awarded in 2019 for $8 million and is intended to accelerate the modernization of Agricultural Marketing Service Specialty Crops Program billing, inspection, and certificate generation and issuance processes that support the inspection of 10.7 billion pounds of processed fruit and vegetable products and 49.9 billion pounds of fresh fruits and vegetables.

USDA was recently informed that our Supply Chain Risk Management project, and we look forward to speaking to anyone on this further investment. Thank you, Mr. Chairman.

Mr. CONNOLLY. Unbelievable. You had two more seconds. Excellent. Thank you so much, Mr. Washington.

Mr. Hinchman, you are recognized for your five minutes of testimony. Welcome.

STATEMENT OF DAVID HINCHMAN, ACTING DIRECTOR, INFORMATION TECHNOLOGY, GOVERNMENT ACCOUNTABILITY OFFICE

Mr. HINCHMAN. Thank you, sir. Chairman Connolly, Congressman Biggs, Majority Leader Hoyer, and members of the subcommittee, thank you for inviting GAO to discuss our work reviewing the Technology Modernization Fund, also known as the TMF.

The Federal Government now spends over $1 billion annually on IT and cyber investments and about 80 percent of that money is used to maintain increasingly costly and aging legacy IT systems. The TMF represents a unique funding approach to improve, retire, or replace these burdensome systems while also providing agencies with a nontraditional funding source to address emergency cyber needs.

To that end, the fund has awarded 23 projects with over $400 million, including this week's awards to the Department of Agriculture and the National Archives. In making these awards the TMF has provided assistance to agencies that are addressing IT challenges ranging from outdated email systems to infrastructure modernization to state-of-the-art cybersecurity deployments.

When the MGT Act created the TMF it established the requirement the GAO review the fund every two years. GAO published our first review in 2019, and our second in December 2021. Today I would like to briefly summarize the findings of our reports including the recommendations we made to improve the quality of agency proposals and improve the administration of the fund.

In our latest report we noted that the scope of the TMF has evolved over time. As originally envisioned, the fund targeted improving the efficiency and effectiveness of Federal IT systems, especially the aging legacy systems that I previously mentioned. But with last year's $1 billion appropriation from the American Rescue Plan Act the TMF broadened its focus to prioritize projects that address immediate cybersecurity gaps, improve the public's access to services, and modernize agency assets.

We also reported that in addition to its change in focus the TMF changed its reward reimbursement requirements. For awards made

through August 2021, a full reimbursement of the award amount was required. However, beginning with awards made in September 2021, the fund allowed agencies to apply for either partial or minimal reimbursement of their awards.

Our reporting has also detailed concerns about the quality of agency proposals and whether these proposals have adequately captured their plans' scopes of work. To apply for a TMF award, agencies are required to submit cost estimates and we are required to review those estimates, based on cost estimating best practices. To date, we have reviewed the 11 awards made through August 2021. However, our analysis of the 11 awards found that 10 of the cost estimates were not reliable.

Further analysis of these 11 awards found that 9 of the 11 projects had not yet realized any of their planned cost savings and a number of these projects decreased their scope post-award. Although changes to IT projects can be expected, it is concerning to see such significant changes to the awarded projects' original plans. This calls into question the extent to which agencies have thoroughly planned and mapped out their objectives prior to applying for TMF funding.

Our findings raise important questions about the proposal process and whether agencies are submitting realistic and achievable plans. Since our most recent report, the TMF has made an additional 12 awards, totaling more than $340 million. The increased amount of the fund's latest awards highlights the importance of basing award decisions on thorough and complete proposal information.

To help address these challenges we believe that GSA should implement our recommendation to provide detailed guidance to agencies on how to complete their cost estimates. We also encourage the stakeholders in the TMF proposal review process to increase their scrutiny of agency proposals and work together to ensure the reward or recipients will deliver the greatest possible value.

In summary, with the current balance of about $750 million available in the fund it is critical that OMB and GSA continue to work with agencies to improve the quality of TMF proposals in order to get the most return on future investment. By continuing to strengthen agency applications and by ensuring that these proposals adequately capture plans' scope and cost, OMB and GSA can better position TMF as a valuable tool for addressing critical IT, cyber, and modernization needs across the Federal Government.

Mr. Chairman, this concludes my statement. Thank you.

Mr. CONNOLLY. Thank you, and 29 seconds to go. You are a pro. Thank you, Mr. Hinchman.

And Ms. Yung, I understand this is your first hearing, ever, to testify, so we promise to approach you gingerly and make it a positive experience. Welcome.

STATEMENT OF RAYLENE YUNG, TECHNOLOGY MODERNIZATION FUND EXECUTIVE DIRECTOR, U.S. GENERAL SERVICES ADMINISTRATION

Ms. YUNG. Chairman Connolly, Ranking Member Hice, Congressman Biggs, and members of the subcommittee, thank you for the opportunity today to testify on the Technology Modernization Fund,

an innovative investment program that plays a key role in transforming the way we deliver simple, seamless, and secure services to the American people.

My name is Raylene Yung, and I serve as the Executive Director of the TMF Program Management Office at the General Services Administration. I would like to thank the committee for your vision and continued support for the TMF and to acknowledge the TMF Board, the Office of Management and Budget, and its Office of the Federal Chief Information Officer as well as the chief information officer community for being our partners in this exciting and important work.

Getting technology right is critical to securing our Nation, delivering public services, and building trust with the American people. It is more important than ever to invest smartly and nimbly in modernization and to make sure our technology actually works the way we need it to.

Unfortunately, it has been difficult to successfully modernize Federal technology at scale. Many teams are managing outdated legacy systems and may lack the tools and expertise to respond to unexpected demands or to course correct if things go wrong.

To address this, the TMF was specifically designed to overcome many of these institutional challenges that can cause modernization efforts to fail. First of all, TMF investments go far beyond just funding. We act as strategic partners, working with agencies side by side to provide support and subject matter expertise in areas ranging from cybersecurity to procurement. In addition, every investment is reviewed carefully, quarterly, by the TMF Board to keep projects on track.

Second, we take an agile, incremental approach so that we can deliver at the speed of need. Every investment is tied to the completion of specific milestones. This shows us key results at every step of the way rather than just all at the end, improving the overall success rates of projects. As our administration at GSA says, we want to see demos, not just memos.

Finally, the TMF has a broad view of technology needs across the Federal Government. This is crucial for seeing similarities across proposals, uncovering what is working best, and connecting agencies to shared resources, and for achieving economies of scale for taxpayers.

And our approach is already delivering results. For example, in 2019, an investment helped the Department of Labor convert an outdated, paper-based certification process to a digital one, saving nearly $2 million a year and eliminating user pain points, especially for farmers and employers who previously had to sign and mail documents. This certification helps ensure the integrity of temporary work visa programs by requiring information on worker recruitment and other components that help protect both U.S. and foreign workers. This investment also doubled the number of certifications the Department can now issue each day, crucial for supporting our farm work, tradecrafts, and hospitality industries.

I am happy to talk about our more recent projects as well, such as the investment we announced just this week to help veterans and many others get quicker online access to records that were previously paper-based and stuck in large backlogs.

Last year, the TMF received a billion dollars from the American Rescue Plan, and we saw a huge demand with over 130 proposals from 60 agencies and components, totaling over $2.5 billion. The investments we have already made represent the Administration's strong comment to both bolstering security and improving the public's interactions with government. Among other things, these investments will help protect the data of 100 million students and borrowers, enhance the security of hundreds of facilities, and streamline how millions of veterans can securely access their benefits.

We aim to allocate the remaining ARP funds this year, and we are collaborating and aligning across government to maximize our impact, whether we are building cybersecurity systems that assume zero trust or making smart upgrades to improve the customer experience.

Thank you for the time today to share more about the TMF, a critical, long-term approach for ensuring that our Federal Government successfully uses technology to deliver for people every day. The President's 2023 budget request for $300 million builds on this success. We ask for your support for this request to continue delivering the experience that taxpayers expect and deserve in the 21st century.

Thank you for the time today.

Mr. CONNOLLY. Are you sure this is your first? You had three seconds left. That is incredible. Thank you so much. I really appreciate the testimony.

We are going to go into a round of questioning, and the chair recognizes the distinguished Congresswoman from the District of Columbia, Ms. Norton, for her five minutes of questioning. Welcome, Congresswoman Norton.

Ms. NORTON. I thank my distinguished friend for recognizing me. I noted, Mr. Hinchman, that a GAO report calculated that the top 10 most critical Federal IT legacy systems in need of modernization cost around $337 million per year, collectively, to maintain. That is a staggering figure for just 10 IT systems.

Mr. Hinchman, why are these systems so expensive?

Mr. HINCHMAN. Congresswoman, we do have a sensitive version of our report that I could discuss in greater detail behind closed doors. However, those systems, generally stated, tend to be significant information systems that conduct mission-critical activities for the various agencies. Those 10 systems are spread across, I believe, 8 or 9 agencies, and forgive me for not knowing the number exactly. And I could describe in greater detail, behind closed doors, about what those specific systems do and why they cost so much.

Ms. NORTON. I appreciate getting that briefing.

Last year, Jason Gray, who is the Chief Information Officer of the Department of Education, testified before this subcommittee. He shared that his work force formerly had to wait 20 minutes every morning for their laptops to boot up. After a massive IT infrastructure modernization effort they cut the average boot-up time to less than one minute. He testified that the purchase was, and I am quoting, "a return on investment of more than 1,500 hours of previously lost productivity per day." In addition, the agency's

cloud storage consolidation project resulted in more than 20 million in savings over a five-year period.

Mr. Washington, your agency secured Technology Modernization Fund investments in a few projects including the Farmers.gov portal. Did the Farmers.gov project reduce financial or time costs to taxpayers, and if so, how?

Mr. WASHINGTON. Congresswoman, Farmers.gov did cut costs for the American taxpayer and time. How so? By the fact that farmers contacted USDA and wanted to have a more modern experience online and had the option of going to the service centers, visiting service centers, or engaging USDA through a digital experience, and we provided that opportunity for them. Now farmers have an opportunity to go online versus going to the service center to get information about the Farm Service Agency and other agencies within the Department of Agriculture and make transactions with the Farm Production and Conservation Service online, improving their experience and giving them some time efficiencies as well.

Ms. NORTON. Ms. Yung, can you briefly discuss other Technology Modernization Fund projects that reduced or avoided government spending?

Ms. YUNG. Absolutely. We have actually covered a few examples today, but I will go into some more detail. One really exciting investment is the recent one we have announced in the National Archives, where they will be taking a very costly, paper-based process that has led to millions of veterans waiting to get their records and access benefits they deserve and moving all of that into an online system.

I actually do want to speak to one other dimension of not just cost savings to the Federal Government or even to the agency that takes on the TMF investment but the fact that we also look at reducing costs to other groups. So, using that example of the NARA investment, we see a cost saving in time and costs for the other agencies that also request records from NARA and to the regular people, the veterans themselves that were spending time and energy mailing and waiting for these paper-based forms to be processed.

So, I just wanted to share that I think something that is really unique to look at our TMF investments is that cost savings can come in many different ways.

Another great example I will share is our investment in Login.gov will enable the Department of Veterans Affairs to greatly streamline the way they enable veterans to access their benefits, and earlier estimates show that the savings that the VA will save after completing this consolidation will number in the hundreds of millions of dollars, which alone would pay off the investment in Login.gov from the TMF.

Mr. CONNOLLY. Thank you very much. The gentlelady's time has expired.

The chair now recognizes the gentleman from Pennsylvania, Mr. Keller, for his five minutes of questioning. Mr. Keller.

Mr. KELLER. Thank you, Mr. Chairman, and thank you to our witnesses for taking time to be with us today.

As data management continues to be driven by technological advancement, we should ensure our government is keeping pace with

necessary changes and improvements. The Technology Modernization Fund, or the TMF, was enacted, as we know, in 2017, the initiative to bolster agency efficiency and cybersecurity.

However, we are 4 1/2 years after it was signed into law. I think it is time we conducted proper oversight on the fund itself and ensure we monitor how effective the TMF has been toward modernizing IT systems.

Ms. Yung, according to a 2019 report by the Government Accountability Office, the TMF Program Management Office did not provide written guidance for developing the cost estimates in a manner consistent with the Federal requirements outlined in GAO's best practices. That was outlined in GAO's best practices and we did not get the guidance. Since that report was issued what change or improvement has the TMF board made to increase transparency and provide clear, accurate reporting?

Ms. YUNG. Thank you for the question, and I just want to start by saying we greatly appreciate the support that the GAO provides through their reporting and helping the TMF improve and become a better program.

So, to answer that specific question the GAO issues some really amazing guides on cost estimation and savings that help agencies provide better estimates. Since that report came out, we not only kind of read and digested all the results very carefully but we have made a number of improvements to the way that we communicate with our agencies and the public.

So, specifically, we now provide written guidance on our website and in every kickoff kind of email and package that send to new investments that point directly to GAO's detailed, 12-step guide to cost estimation. We also remind agencies of this guidance and meet with them quarterly to hear the latest on cost savings and cost reduction and are excited to kind of see the results of those improvements in the coming months.

Mr. KELLER. So, basically you would be able to provide a report of how the changes have impacted positively, you know, what is happening within the agencies?

Ms. YUNG. So, I will acknowledge that many of our investments are still early so the work is just beginning in many cases, but I would be happy to followup with you and your staff offline to share whatever information we can that might be helpful.

Mr. KELLER. OK. I appreciate that. You know, and we have talked a lot about the veterans' access to record at the NPRC, and our office has been pushing for two years to get the process streamlined and have the accountability and the speed, you know, eliminating the backlog for the NPRC so our veterans can get the service they have earned and deserve.

The General Services Administration recently announced funding from the TMF would be used to modernize its recordkeeping and document access systems. Will there be additional lags in the records backlog while this new system is implemented?

Ms. YUNG. I would definitely like to refer to the colleagues at the National Archives to speak to the detailed specifics of their projects, given that we are just kicking off the investment this week. That said, I will say the backlog is a problem that, as you mentioned, has existed for multiple years, and the focus of the

TMF investment is on bringing online this new process that will be much more efficient and have a much better experience for veterans.

Mr. KELLER. I appreciate that because I know we had a meeting on that before and some different things, and they brought up some issues they had with records that were destroyed in a fire, and that fire took place many years ago. I am just hopeful that they will be more responsive and make sure that they do not create any more of a backlog as we implement these things.

I thank you and I yield back.

Mr. CONNOLLY. I thank the gentleman, and I have also experienced some of that backlog because of that fire you reference holding up medals and other awards for veterans who have earned them, so I thank you for bringing that to our attention in this hearing.

The chair now recognizes the distinguished, extraordinary gentleman from Massachusetts, the chairman of the Subcommittee on National Security, Mr. Lynch. Welcome, Mr. Lynch.

Mr. LYNCH. Good morning, Mr. Chairman, and thank you once again for holding this hearing.

I do want to say, at the outset, that I associate myself with your remarks at the beginning of this hearing regarding the massacre in Uvalde, Texas. I do not think it is politics when legislators, like ourselves, discuss ways to protect the people that we represent and the people of our country. So, I do not think you were being political in any respect. It is our collective responsibility, I think, to debate those laws and consider ways that we might prevent what happened yesterday from ever happening again. So, I will leave that alone.

So, Ms. Yung or any of the other witnesses, I know that we were fully engaged in the Log4j vulnerability. I know that seems like 10 years ago, but it was so pervasive and affected so many of our systems, and that code vulnerability was, again, so widespread. I just was wondering if either the fund or—I know that CISA had engaged in a public-private effort to patch that vulnerability and to move forward, and I was just wondering if any of you have been involved in that effort and if you could report on the progress that we have made.

Ms. YUNG. I am actually happy to also refer to my colleague, CIO Washington, in case there is something specific at an agency that may be more applicable. But I would love to share a bit about cybersecurity and how the TMF thinks about it.

Cybersecurity is a top priority for the fund. We are lucky to have some cybersecurity experts such as Chris DeRusha, the Federal Chief Information Security Officer, and Matt Hartman, the Deputy Executive Assistant Director, at CISA, of Cybersecurity, that serve on our board. And so we regularly are engaging with the latest cybersecurity priorities and thinking about how to support the agencies that we invest in.

We also have a working group of subject matter experts in cybersecurity that are ensuring that the latest guidance and priorities are being factored into everything that we do.

So, I just want to emphasize that.

Mr. LYNCH. Ms. Yung, if you do not have anything that is responsive to my question then I would rather not burn my time, if you do not mind.

Ms. YUNG. OK.

Mr. LYNCH. I appreciate the landscape assessment but that is not what I asked. You know, we had a very serious vulnerability and I was just wondering if we had cleaned that up, and it does not sound like there are any witnesses that could speak to that.

So, let me ask you, so it is the general assessment—and, you know, I chair that subcommittee on national security—there are some thoughts that Russia has not really retaliated against us with the full force of their cyber forces, and there is some concern that their zero-day vulnerabilities are so serious that they do not feel they need to deploy them yet but that they hold them in reserve. Is there any sense within your groups that that may be the case?

Mr. CONNOLLY. Steve, were you directing that to any particular witness?

Mr. LYNCH. Yes, all of them. All of them.

Mr. CONNOLLY. All right. Mr. Hinchman, why don't you start?

Mr. HINCHMAN. Sure. Thank you. GAO tends to come in after the fact, Congressman. We tend to be requested by Congress to review incidents after they happen. We recently——

Mr. LYNCH. Yes, so why don't we speak to Log4j then? That happened a while ago and people have been working on that for a long time, and I am just concerned about have we made any progress on that.

Mr. HINCHMAN. Yes, sir. I do not believe we have been requested to review that yet, but I can go back and check and get back to you for the record.

Mr. LYNCH. OK. That troubles me greatly.

Mr. Chairman, I will yield back the balance of my time. Thank you.

Mr. CONNOLLY. I thank the gentleman.

The extraordinary gentlelady from Ohio is now recognized, Ms. Brown, for her five minutes. Welcome.

Ms. BROWN. Thank you. Thank you, Mr. Chair, for holding this hearing, and thank you to all the witnesses for joining us today.

Congress has provided the Technology Modernization Fund a little under $1.2 billion through the annual appropriations process and the American Rescue Plan. Now that sounds like a lot of money but, Mr. Hinchman, how much money does the Federal Government spend on Federal IT each year, and do you think $1 billion is enough to shore up all Federal Government IT modernization opportunities, and if not, why?

Mr. HINCHMAN. The Federal Government spends, unclassified budgets, approximately $100 billion every year. Of that, approximately 80 percent, or $80 billion, are spent on operating and maintaining existing systems.

The current $1 billion in the apportion, while it could make a noticeable difference in agencies' modernization efforts, is not enough, quite frankly. With 24 major government agencies, all of which have their own need, modernization needs, that is a small drop in the bucket compared to what would probably be required.

Ms. BROWN. Thank you. During its lifetime, the Technology Modernization Fund experienced a change in its repayment structure and a large influx of funding. Mr. Washington, you have submitted multiple projects for fund consideration and the fund has approved four of them. How has your experience with the Technology Modernization Fund changed as the program evolved?

Mr. WASHINGTON. Thank you for that question, Congresswoman. My experience with the Technology Modernization Fund has been great. OMB and GSA, specifically, have been great partners in the fund. They have been very informative and assisted us through the entire process. So, the only change that I would submit in terms of the customer experience would be the length of time, which has an impact on the scope and impacts the cost estimates. But outside of that we have had a great experience with the Technology Modernization Fund.

Ms. BROWN. Thank you very much.

Clerk, I believe we have a chart. Thank you so much.

By May 2020, 60 agencies submitted 130 proposals to the Technology Modernization Fund board totaling more than $2.5 billion in requests. Despite the overwhelming demand and need for IT modernization throughout the Federal Government the fund has more than $756 million yet to be awarded. Some agencies have criticized the program for being too slow to get money out the door.

Ms. Yung, from the board's perspective how did loosening the repayment requirements affect your ability to fund projects, and Mr. Hinchman, after her, what reforms might help get award money to agencies more efficiently while ensuring projects retain quality control?

Ms. YUNG. Thank you for the question. I just want to kind of address the note you mentioned about the balance. You know, the goal of TMF is really to maximize the impact of technology for the American public. It is not really about investing as fast as possible. It is about balancing speed with the quality of the work and the probability of success for the investment, and ultimately the impact of those investments.

So, I do want to share that in the past eight months the TMF has received and reviewed more proposal and made more investments than in the previous 3 1/2 years combined. So, because of that unprecedented demand that you mentioned we have really had to kind of change the way that we operate. It is a very different story to look through and carefully review 130 proposals and ensure that in the end we are being responsible stewards of taxpayer dollars.

But I am excited to share that we have really improved our operations and we are actually on track to invest the remaining balance of the American Rescue Plan dollars this year and to do so thoughtfully in, I think, what are going to be very exciting investments.

Ms. BROWN. Thank you.

Mr. CONNOLLY. Mr. Hinchman, you can answer part 2 of Ms. Brown's question.

Mr. HINCHMAN. Absolutely. From the GAO perspective there are a couple of things that come to mind. One is our outstanding recommendation on providing explicit guidance to agencies about how to complete their cost estimates so that the proposals that they

submit are as strong as possible. We appreciate OMB and GSA's efforts in the past to address our outstanding recommendations, but we think that there is a little bit more that we could offer agencies so that they understand how this process works and how it navigates.

And to that end I think, also, that we could be a little more transparent with agencies so that they know how the process works, what is going to happen, what the timeline is going to look like, and what they can expect.

Ms. BROWN. Thank you. Thank you, Mr. Chairman. My time has expired. I look forward to continuing to conduct oversight of taxpayer dollars to ensure these are spent wisely. Thanks again.

Mr. CONNOLLY. And we thank you. You are one of the most faithful members of this subcommittee. We really appreciate it, Ms. Brown.

And let the record show we have been joined by the distinguished vice chair of the subcommittee, Ms. Porter of California, and I see Mr. Khanna of California has also joined us. I know it is early in California.

The chair will now recognize himself for five minutes of questioning.

Ms. Yung, what is your understanding of why Congress created TMF? Why do we need it? Spending $100 billion-plus a year on IT, isn't that enough? Why do you need more?

Ms. YUNG. I think just to reflect a few things that have already been said. You know, we have this tremendous amount of investment happening annually, but it is not being successful. Over 80 percent is for the maintenance of existing systems, and that is not good fit for today's world. I would say the world is changing rapidly when it comes to technology. We know the demand for great technology is not only increasing over time but I think as people, our bar for how we expect technology to work for us is also rising steadily. So, if you are able to order groceries on your phone and yet you have to print and mail out forms to access benefits, that gulf is incredibly wide and only growing.

So, I think these are a lot of reasons why I think the TMF reflects this opportunity to do something different, to show what is truly possible with technology and to demonstrate just a more effective way to modernize.

One last thing I will say is, you know, we talk a lot about updating government technology, bringing legacy systems and making them up to date. But I will just say that coming from the private sector we want to go past making technology just up to date. If you think of large-scale software platforms that power private sector companies, technology is not just up to date. It is updated daily. It is responsive and it is responsive to people's changing needs.

Mr. CONNOLLY. So, help us understand. I mean, I mentioned in my opening statement that while we did provide $1 billion, that went from zero to $1 billion so we felt good about that, but it was $1 billion also compared to the $8 billion President Biden wanted for TMF out of a $9 billion IT request, special request. And you have got $2.5 billion or so in requests for projects and you only have $1 billion to give out.

So, how are you prioritizing, just in general. You do not have to give us, you know, project award criteria, but how in the world do you sort that through given that demand, and what is that demand telling you?

Ms. YUNG. I just want to come back to, I think, the ultimate intention here is how do we maximize the impact to the American public. So, we look at different ways that these investments can better serve the people. So, what is the urgency of the problem? What is the direct impact that it has on, you know, applying for benefits and serving people well?

I think the other thing to share about what we would do with more, a lot of times we talk about recovering from issues, recovering from breaches, and what I might call reactive remediation of problems. I think what we can do with more investment is move to a proactive model, so not just saying hey, we have this large backlog that we need to clear. Instead we can look and say, what are the systems that are at risk of generating backlogs the next time something goes wrong and getting ahead of that and being proactive in improving our technology and making it work better.

Mr. CONNOLLY. I would hope that given the fact we do not have all the money in the world, and we do not even have all the money we had wanted, that one of the things we look at is, is this additive? In other words, without this funding you would not do it, because you can't, or given everything you are dealing with you probably wouldn't get around to it. This moves it up in the timeline and it allows us to get it done, in addition to all the other criteria you mentioned. Is that a factor?

Ms. YUNG. Absolutely, and actually to give a great example, a project that is nearing completion right now, taken on by the U.S. Customs and Border Protection Agency, that actually shared that without TMF funding they would have been managing these decades-old mainframe systems and maybe slowly improving them year after year, but really just maintaining them. But with the TMF investment they are able to prioritize and do a single effort to kind of get rid of those legacy systems once and for all, and I don't think that would have happened without the TMF investment.

Mr. CONNOLLY. Thank you so much, and I am going to give Mr. Hinchman the last word. But let me just say, by the way, a preface. As somebody who co-wrote the bill creating TMF I can tell you what was in our mind, all of us, Republican and Democrat, which was that you need a catalytic fund. You need something to catalyze managers to act. It is a big risk if you are trying to replace legacy systems. It is a huge financial commitment and it is usually multiyear.

And so, you know, the average lifespan of a political manager in the Federal Government is 18 to 24 months, right? So, when I look at that kind of short horizon, where do I put my chips? What do I want? Am I really willing to risk all of this—and, by the way, it might go south—and not even live politically to see it, because I am gone?

And so we felt that given the fact that, as you pointed out in your testimony, Mr. Hinchman, 80 percent of that $100 we spend every year is already spoken for just to maintain, it does not leave

as much money as people may think to undertake a whole new replacement system and all the risks and time that entails. And so maybe you would like to comment on that, from GAO's perspective of why we created TMF, how you see it evolving, and addressing what I just said in terms of what managers in the Federal Government face given those legacy systems and the money is already largely spoken for.

Mr. HINCHMAN. Sure. I think my first thought would be that the budget process, the standard budget process as it currently exists is not IT's friend. IT moves too quickly. Emergent cyber needs make themselves known that need to be addressed, and you cannot wait the two-plus years that you might need to otherwise.

Innovative approaches like the TMF provide a way to help IT get around obstacles like that. It does not mean that for a major, large, massive system investment we should not go through the regular appropriations process. I think that makes sense. But when you have a small, for instance, NARA's attempt to move into electronic this paper-driven system this seems like a great opportunity for TMF to become available, to help these agencies get these quick wins that make very significant, noticeable differences in how an agency provides its citizen services, which is, at the end of the day, why we are here.

And I think that looking at how the TMF has moved so far it certainly has provided those opportunities for agencies, and I think we heard it that they might not otherwise be able to approach these problems.

Now as an auditor I am always going to be a little cautious that we want to make sure we are directing the funds to the right places, that the agencies have come to us with as solid a business case as possible so that we know the money is being targeted the right way. And that is just kind of the auditor-ness—we always want to be careful. And as an auditor at GAO, we always argue for as much transparency as possible so that an outsider can know that these funds are being well spent and directed to good places, but also maybe even have an understanding of why some investments were not picked. But I think and then also understanding what the agency plans to do with that as well as perhaps a better view than what is available now as to what progress they are making with those invested funds.

Mr. CONNOLLY. Thank you. No, I think that is absolutely right. In fact, frankly, we need this partnership because we need TMF to put points on the scoreboard so that we can broaden the case for why we have to make these investments.

And Mr. Washington, I saw you shaking your head a little while ago in agreement in terms of sort of how the rationale for TMF was applying to your agency, USDA, with the four projects you talked about in your testimony.

Mr. WASHINGTON. Thank you, Mr. Chairman. The TMF is extremely important to USDA. As you know, we service foresters, ranchers, farmers, economists, statisticians, nutrition services, animal and plant health, so we desperately have an appetite for modernization. And as Mr. Hinchman stated, the appropriations process is not conducive to rapidly supporting modernization efforts, and our focus in USDA, quite frankly, is to improve our service de-

24

livery to our customers and be a more customer-centric organization and be data-driven. And we plan on using the TMF to accomplish just that.

Mr. CONNOLLY. Thank you so much.

In closing I want to thank our panelists for their remarks. I want to commend all my colleagues for participating in this important conversation.

With that, and without objection, all members will have five legislative days within which to submit extraneous materials and to submit additional written questions for the witnesses through and to the chair, which will be forwarded to the witnesses for hopefully their expeditious responses.

And I want to again thank you all for participating here today. This hearing is adjourned.

[Whereupon, at 11:33 a.m., the subcommittee was adjourned.]

○