THE FEDERAL INFORMATION TECHNOLOGY RE- FORM ACT (FITARA) SCORECARD 3.0: MEAS- URING AGENCIES IMPLEMENTATION

JOINT HEARING

BEFORE THE

SUBCOMMITTEE ON
INFORMATION TECHNOLOGY

AND THE

SUBCOMMITTEE ON
GOVERNMENT OPERATIONS

OF THE

COMMITTEE ON OVERSIGHT
AND GOVERNMENT REFORM
HOUSE OF REPRESENTATIVES

ONE HUNDRED FOURTEENTH CONGRESS

SECOND SESSION

DECEMBER 6, 2016

Serial No. 114–171

Printed for the use of the Committee on Oversight and Government Reform

COMMITTEE ON OVERSIGHT AND GOVERNMENT REFORM

JASON CHAFFETZ, Utah, *Chairman*

JOHN L. MICA, Florida
MICHAEL R. TURNER, Ohio
JOHN J. DUNCAN, JR., Tennessee
JIM JORDAN, Ohio
TIM WALBERG, Michigan
JUSTIN AMASH, Michigan
PAUL A. GOSAR, Arizona
SCOTT DESJARLAIS, Tennessee
TREY GOWDY, South Carolina
BLAKE FARENTHOLD, Texas
CYNTHIA M. LUMMIS, Wyoming
THOMAS MASSIE, Kentucky
MARK MEADOWS, North Carolina
RON DESANTIS, Florida
MICK, MULVANEY, South Carolina
KEN BUCK, Colorado
MARK WALKER, North Carolina
ROD BLUM, Iowa
JODY B. HICE, Georgia
STEVE RUSSELL, Oklahoma
EARL L. "BUDDY" CARTER, Georgia
GLENN GROTHMAN, Wisconsin
WILL HURD, Texas
GARY J. PALMER, Alabama

ELIJAH E. CUMMINGS, Maryland, *Ranking Minority Member*
CAROLYN B. MALONEY, New York
ELEANOR HOLMES NORTON, District of Columbia
WM. LACY CLAY, Missouri
STEPHEN F. LYNCH, Massachusetts
JIM COOPER, Tennessee
GERALD E. CONNOLLY, Virginia
TAMMY DUCKWORTH, Illinois
ROBIN L. KELLY, Illinois
BRENDA L. LAWRENCE, Michigan
TED LIEU, California
BONNIE WATSON COLEMAN, New Jersey
STACEY E. PLASKETT, Virgin Islands
MARK DESAULNIER, California
BRENDAN F. BOYLE, Pennsylvania
PETER WELCH, Vermont
MICHELLE LUJAN GRISHAM, New Mexico

JENNIFER HEMINGWAY, *Staff Director*
ANDREW DOCKHAM, *General Counsel*
TROY D. STOCK, *Information Technology Subcmmittee Staff Director*
JULIE DUNNE, *Senior Counsel*
SHARON CASEY, *Deputy Chief Clerk*
DAVID RAPALLO, *Minority Staff Director*

CONTENTS

THE FEDERAL INFORMATION TECHNOLOGY REFORM ACT (FITARA) SCORECARD 3.0: MEASURING AGENCIES IMPLEMENTATION

Tuesday, December 6, 2016

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON INFORMATION TECHNOLOGY, JOINT
WITH THE SUBCOMMITTEE ON GOVERNMENT OPERATIONS,
COMMITTEE ON OVERSIGHT AND GOVERNMENT REFORM,
Washington, D.C.

The subcommittees met, pursuant to call, at 2:00 p.m., in Room 2154, Rayburn House Office Building, Hon. Tim Walberg presiding.

Present from the Subcommittee on Information Technology: Representatives Hurd, Farenthold, Walker, Blum, Gosar, and Kelly.

Present from the Subcommittee on Government Operations: Representatives Walberg, Carter, Grothman, Connolly, Maloney, Chaffetz and Plaskett.

Mr. WALBERG. The Subcommittee on Information Technology and the Subcommittee on Government Operations will come to order.

Without objection, the chair is authorized to declare a recess at any time.

In fiscal year 2017, the Federal Government plans to invest more than $89 billion on IT. This is a significant area of Federal spending that requires Congress' attention. We focus so much attention on Federal IT acquisition and management because it's simply important to everything agencies do and because IT acquisition remains on the GAO high-risk list.

I would like to acknowledge that there has been progress. The GAO has reported that, as of October 2016, OMB and Federal agencies have fully implemented about 46 percent of about 800 GAO recommendations that led to this area being put on the high-risk list. Now this hearing continues this committee's oversight of agencies' implementation of FITARA. In fact, this is the third FITARA scorecard hearing, or, as we like to call it, "FITARA Scorecard 3.0."

After today, we will have heard testimony from nine agencies. The scorecard, which the committee developed with assistance from GAO, continues to use the same key areas— data center consolidation, IT portfolio review savings, risk-assessment transparency, and incremental development—for purposes of measuring agencies FITARA implementation.

There has been progress in the grades: 12 agencies improved their grade; 11 stayed the same; and 1 agency's grade declined. I would also note that NASA, which was one of the agencies at our

May 2016 FITARA hearing, improved from two straight Fs to a C-plus. DHS improved its FITARA grade from a C to a B-minus. State's grade declined slightly from a D to a D-minus. In fiscal year 2016, DHS spent $6.2 billion while State spent 2 billion on IT.

FITARA provides a critical tool to effectively manage these IT investments. We'll continue our FITARA oversight in the next Congress, and I commend Mr. Hurd for his leadership on this oversight.

I now want to recognize Ms. Kelly, ranking member of the Subcommittee on Information Technology, for her opening statement.

Mr. KELLY. Thank you.

As this session of Congress draws to an end, I want to thank Chairman Hurd, Chairman Meadows, and Ranking Member Connolly for your leadership and partnership during the 2 years our subcommittees have been working together to monitor how Federal agencies manage their information technology projects. In that timeframe, our subcommittee has held extensive hearings that examine the state of IT at almost every Federal agency and heard testimony from the majority of Federal chief information officers on the challenges they face in overhauling the management of IT resources.

Our subcommittees also worked together to develop our very own scorecard for grading agency progress and implementing the requirements of the Federal Information Technology Acquisition Reform Act, or FITARA.

Last November, we released the first of these scorecards and held our first hearing to discuss the grades of three agencies. Since then, our subcommittees have released updated scorecards at least twice a year and held hearings with different agencies to hold them accountable for implementing the FITARA provisions. Since we first began conducting oversight over the 24 agencies FITARA covers, we have already seen a marked improvement with several of those agencies.

For example, since the release of our last scorecard, NASA's overall grade went from F to a C-plus. The Department of Education and Energy also showed substantial improvement since the last scorecard going from an F to a C. Overall, since May of this year, 12 agencies have shown improvement in their overall grades.

Looking beyond the grades, I am encouraged by the responsiveness of most agencies and their progress to date in FITARA implementation. Notably, governmentwide data center consolidations alone have realized over 1.6 billion in savings. These are all good first steps, but it's clear that there remain obstacles to overcome in implementation. The new scorecard shows that some agencies have hit roadblocks, that some have fallen behind in implementation.

I believe that our oversight hearings have helped improve accountability of IT management in Federal agencies. I believe hearings like these will be as important next year, and I hope there will be bipartisan interest in holding the next administration to the same high standards we have held the current administration.

The stakes are simply too high when it comes to improving the efficiency and security of the Federal Government's IT systems. The Federal Government's IT acquisition process isn't just an inef-

ficient use of taxpayers' money. It also poses a security risk as too many agencies are still having to rely on outdated legacy IT systems that, with each passing year, cost more and more to secure and maintain.

I want to thank the witnesses for testifying today. I know that an overhaul of your IT acquisition and management is not an easy task, so I look forward to hearing how your agencies are handling the challenges in implementing FITARA.

Thank you, Mr. Chair, and I yield back.

Mr. WALBERG. I thank the gentlelady.

And now I recognize Mr. Connolly, ranking member of the Subcommittee on Government Operations, for his opening statement.

Mr. CONNOLLY. Thank you, Mr. Chairman.

And I thank my co-collaborator, Ms. Kelly, for her leadership, Mr. Hurd, and Mr. Meadows. The four of us have tried to act as one in terms of oversight, and I think that's been pretty effective, and we're going to continue to do the same in the 115th Congress, so look forward to working with you again, Ms. Kelly.

I think oversight by the two subcommittees of the Federal Information Technology Acquisition Reform Act, better known as Issa-Connolly, is really important because that didn't happen in its predecessor legislation known as Clinger-Cohen. Our bipartisan legislation represents the first major reform of laws governing Federal IT management since 1996.

When I was chairman of Fairfax County just across the river, I used to tell our staff we needed three things to be successful: We needed a clear mission. We needed passion for that mission. And we needed metrics to measure progress on that mission.

With FITARA's passage, we clarified the mission, and these scorecards, I believe, give us the metrics to try to see how we're doing and to keep the pressure on ourselves to implement.

I'm pleased to see these subcommittees continuing to exercise its oversight responsibility. Since our last hearing in May, I, like Ms. Kelly, am encouraged by how quickly the administration and the majority of Federal agencies have in fact embraced the effort. I appreciate the leadership of Federal CIO Tony Scott and the Office of Management and Budget, and the GAO, Mr. Powner and Gene Dodaro in particular. I hope for continued leadership in the new administration and a renewed focus on implementation.

As I stated at that hearing in May, the results of the scorecard should not be seen as some kind of scarlet letter on the backs of agencies but rather a guidepost, a milestone on the path toward self-improvement. The scorecard process ought to be dynamic, continually incorporating stakeholder feedback with the possibility of eventually including all seven pillars of FITARA.

We received favorable feedback from agency CIOs on the components of the scorecard, but we do recognize that there is always room to improve the metrics that are used to determine agency progress. The enormous amount of feedback we've received has proved that agencies are taking FITARA seriously.

Charged by Congress to provide quarterly progress reports, the GAO examined OMB's steps to consolidate data centers, enhance agency transparency, and implement incremental development. These metrics were selected because their implementation will

have a demonstrable benefit on IT acquisition and operation, and this data is updated and available on a quarterly basis.

The scorecard is a tool of both congressional oversight of FITARA and CIO empowerment. FITARA requires CIOs to certify that IT investments are adequately implementing incremental development. We wanted to include CIO authorities in the scorecard because this will tell us if CIOs are being given the tools to succeed, and if they are not, then that becomes either an issue of additional congressional oversight or a foothold for CIOs to assert themselves under the law. It's important that Congress continue its oversight and urge OMB to clarify its guidance directing agencies to make information about major IT investments publicly available.

On a related front, I was proud to join my friend Will Hurd in introducing the Modernizing Government Technology Act. The bill makes a significant upfront investment to retire vulnerable large-scale legacy systems affecting multiple agencies. The bill allows agencies to use savings generated through FITARA and other reforms to make investments in cloud transition.

The act passed easily through this committee and on the House floor. Unfortunately, because of a last-minute CBO scoring issue— the priesthood of the CBO, Mr. Chairman, is one that mystifies all of us, and the infallibility we invest the CBO with would make the Pope in Rome envious. I would like to express some concern on a different issue with the lack of perceived support for FITARA implementation many CIOs have experienced within their agencies because of leadership squishiness, if one could call it that.

I find it unacceptable for any of the agencies to be working against the intent of FITARA. Secretaries of agencies and division heads and likewise ignoring the critical role of CIOs in FITARA implementation and in directing IT investment defeats the very purpose of the law. We found that some agencies are struggling to elevate the CIO position to its appropriate management level.

I look forward to hearing from the Department of Homeland Security and the Department of State today about their efforts to streamline CIO reporting authorities, and this is an issue that will carry through in the next Congress with the next administration. It's not going to go away.

Finally, I was pleased to see that DHS surpassed its savings goal by reporting $248 million from consolidation of data centers. However, I have concern about the Department's lack of a strategic plan. It was also disappointing to see that the State Department reported zero savings from data center consolidation or IT portfolio review. Strange, Mr. Wiggins and Mr. Pitkin. We certainly look forward to an explanation of that.

State has also underperformed in assessing the risk in its major IT investments. I look forward to working with Mr. Wiggins to improve that performance moving forward.

And, with that, Mr. Chairman, I yield back. Thank you.

Mr. WALBERG. I thank the gentleman.

I'll hold the record open for 5 legislative days for any members who would like to submit a written statement, but now we recognize our panel of witnesses.

I'm pleased to welcome back in front of us, Mr. David Powner, Director of IT Management Issues at the U.S. Government Ac-

countability Office; the Honorable Chip Fulghum, Deputy Under Secretary of Management and Chief Financial Officer at the U.S. Department of Homeland Security; Mr. Luke McCormack, Chief Information Officer at the U.S. Department of Homeland Security; the Honorable Frontis Wiggins, III, Chief Information Officer at the Bureau of Information Resource Management at the U.S. Department of State; and Mr. Douglas Pitkin, Director of Budget and Planning at the U.S. Department of State.

Welcome to you all. Pursuant to committee rules, all witnesses will be sworn in before they testify, so if you would please rise and raise your right hands.

Do you solemnly swear or affirm that the testimony you are about to give will be the truth, the whole truth, and nothing but the truth?

Thank you. You may be seated. Let the record reflect that the witnesses all answered in the affirmative.

In order to allow time for discussion, we would appreciate it if you would please limit your testimony to 5 minutes. Your entire written statement will be made part of the record.

And so now it's my pleasure to recognize Mr. Powner for your 5 minutes of testimony.

WITNESS STATEMENTS

STATEMENT OF DAVID A. POWNER

Mr. POWNER. Chairman Walberg, Ranking Members Kelly, Connolly, and Mr. Farenthold, I'd like to thank you and your staff for your continued oversight on implementation of FITARA with this third set of grades. Clearly, we have seen improvements over the past 2 years from several agencies.

The 800 recommendations GAO has made on our IT high-risk area are associated with many of the FITARA areas, are about 46 percent addressed. That's a substantial increase from last year. Your latest set of grades has 12 agencies improving, 11 staying the same, and 1 lower. Your oversight has been critical here.

Take, for example, NASA, one of your witnesses at your last hearing for receiving the only F, now receiving a C-plus. NASA has made great strides in the data optimization area, and Renee Wynn deserves much credit.

I'd like to emphasize the criticality of the four areas this committee is focused on. Although there has been progress, we still have too many acquisitions that use a waterfall approach; too many duplicative systems; transparency of IT spending isn't as accurate as we need; and we have data centers that are far from being optimized.

Let's look at the data center situation. For the first time, we finally see inventory stabilizing around 10,000 centers. We have closed just over 4,300 centers. And five agencies have closed more than 50 percent of their centers. These are Ag, Justice, Treasury, GSA, and NASA. There are about another 1,300 centers planned to be closed. Although the closures look good, savings and meeting optimization metrics don't.

Our last report in my testimony highlights the fact that agencies have saved about $3 billion to date and another $5 billion was

planned. New reporting required in FITARA and to OMB is incomplete and only showing less than $500 million in outyear savings, a tenth of what it should be.

Our ongoing work for this committee will be making recommendations to address this to ensure that we save at least $5 billion so that we can use this for critical modernization needs. We actually believe there is more savings than the $5 billion, taking into account agencies' limited progress toward meeting the five optimization metrics.

The new grading area associated with whether the CIO reports to at least the DepSec is a good start towards delving into CIO authorities more completely. In fact, agencies' CIO self-assessments to OMB are higher on average if they report to the agency head.

We have ongoing work for this committee on CIO authorities that could further inform comprehensive grading and oversight in this area. Clearly, CIO authority is still a mayor issue at departments and agencies.

As we have discussed, Mr. Chairman, there is even more this committee could do to help CIOs with their authorities. The first is ensuring that CIOs have full support from the heads of departments and agencies. We think your suggestion that the heads of agencies be asked to testify at these FITARA hearings in the next Congress is a good one.

The Comptroller General, Gene Dodaro, held a forum recently on our IT high-risk area and FITARA that Chairman Hurd and Ranking Member Connolly participated in that we thank you for, along with former and current Federal and agency CIOs. We will soon be publishing the results of this forum.

One of over 200 key things that came out of that session was the need for top agency support regarding cyber and IT issues. Another area that this committee should consider is the IT workforce under the CIO. We issued a report 2 weeks ago for this committee that showed agencies need to do a better job assessing their IT staffing needs by performing gap assessments and putting in place plans to bolster the IT workforce. Enhancements to your scorecard and FITARA oversight in the next Congress, we believe, should be focused on critical targeted areas. This starts with ensuring CIOs have support from the top.

Next, we need qualified and accountable CIOs. By "accountable," we mean those that welcome the strength in CIO authorities and this committee's oversight and assistance in strengthening those authorities.

Then we need a stronger, more robust IT workforce under the CIO. This would include the needed influx of private sector talent that is more integrated into the Federal IT workforce because at times the current efforts at the White House and GSA are a bit too much of a we-versus-them mentality. So, in addition to bolstering top support, strengthening CIO authorities in the IT workforce, we believe there needs to be better transparency, more incremental and agile development, and more efficient legacy spending. On the legacy side, we still need to focus on eliminating wasteful duplicative spending and optimizing our data centers, which would include far greater cloud adoption.

Despite the billions already saved, there are billions of dollars still on the table that can be saved that are directly tied to your scorecard. These savings can be used to modernize and perhaps fill agencies' working capital funds that this committee has introduced.

Thank you, again, for your oversight, and I look forward to your questions.

[Prepared statement of Mr. Powner follows:]

United States Government Accountability Office

GAO

Testimony

Before the Subcommittees on Government Operations and Information Technology, Committee on Oversight and Government Reform, House of Representatives

For Release on Delivery
Expected at 2:00 p.m. ET
Tuesday, December 6, 2016

INFORMATION TECHNOLOGY

Improved Implementation of Reform Law Is Critical to Better Manage Acquisitions and Operations

Statement of David A. Powner, Director
Information Technology Management Issues

GAO Highlights

INFORMATION TECHNOLOGY

Improved Implementation of Reform Law Is Critical to Better Manage Acquisitions and Operations

Why GAO Did This Study

The federal government is likely to invest more than $89 billion on IT in fiscal year 2017. Historically, these investments have frequently failed, incurred cost overruns and schedule slippages, or contributed little to mission-related outcomes. Accordingly, in December 2014, IT reform legislation was enacted, aimed at improving agencies' acquisitions of IT. Further, in February 2015, GAO added improving the management of IT acquisitions and operations to its high-risk list. Between fiscal years 2010 and 2015, GAO made about 800 recommendations related to this high-risk area to OMB and agencies.

This statement summarizes agencies' progress in improving the management of IT acquisitions and operations. To do so, we reviewed and summarized GAO's prior and recently published work on (1) data center consolidation, (2) risk levels of major investments as reported on OMB's IT Dashboard, and (3) implementation of incremental development practices.

What GAO Recommends

GAO has previously made numerous recommendations to OMB and federal agencies to improve the oversight and execution of the data center consolidation initiative, the accuracy and reliability of the IT Dashboard, and incremental development policies. Most agencies agreed with GAO's recommendations or had no comments. GAO will continue to monitor agencies' implementation of these recommendations.

What GAO Found

The Office of Management and Budget (OMB) and federal agencies have taken steps to improve federal information technology (IT) through a series of initiatives and, as of October 2016, had fully implemented about 46 percent of the approximately 800 related recommendations made by GAO (a 23 percent increase compared to the percentage reported in 2015). However, additional actions are needed.

- **Consolidating data centers.** In an effort to reduce the growing number of data centers, OMB launched a consolidation initiative in 2010. GAO reported in March 2016 that agencies had closed 3,125 of the 10,584 total data centers and achieved $2.8 billion in cost savings and avoidances through fiscal year 2015. Agencies are planning a total of about $8.2 billion in savings and avoidances through fiscal year 2019. GAO recommended that the agencies take actions to meet their cost savings targets and improve optimization progress related to their data center consolidation and optimization efforts. Most agencies agreed with the recommendations or had no comment.

- **Enhancing transparency.** OMB's IT Dashboard provides detailed information on major investments at federal agencies, including ratings from Chief Information Officers (CIO) that should reflect the level of risk facing an investment. GAO reported in June 2016 that agencies had not fully considered risks when rating their major investments on the IT Dashboard. In particular, of the 95 investments reviewed, GAO's assessments of risks matched the CIO ratings 22 times, showed more risk 60 times, and showed less risk 13 times. Several issues contributed to these differences, such as CIO ratings not being updated frequently. GAO recommended that agencies improve the quality and frequency of their ratings. Most agencies generally agreed with or did not comment on the recommendations.

- **Implementing incremental development.** A key reform initiated by OMB has emphasized the need for federal agencies to deliver investments in smaller parts, or increments, in order to reduce risk and deliver capabilities more quickly. Since 2012, OMB has required investments to deliver functionality every 6 months. In August 2016, GAO reported that 22 agencies had reported that 64 percent of 469 active software development projects planned to deliver usable functionality every 6 months for fiscal year 2016. Further, for 7 selected agencies, GAO identified significant differences in the percentages of software projects reported to GAO as delivering functionality every 6 months, compared to what was reported on the IT Dashboard. This was due to, among other things, inconsistencies in agencies' reporting on non-software development projects, and the timing of reporting data. GAO made 12 recommendations to 7 agencies and OMB to improve the reporting of incremental data on the IT Dashboard and the policies for CIO certification of adequate incremental development. Most agencies agreed or did not comment on our recommendations, and OMB did not agree or disagree.

_____ United States Government Accountability Office

Chairmen Meadows and Hurd, Ranking Members Connolly and Kelly, and Members of the Subcommittees:

I am pleased to be here today to discuss our recent work related to the December 2014 information technology (IT) reform law (commonly referred to as the Federal Information Technology Acquisition Reform Act or FITARA).[1] As you know, the effective and efficient acquisition and management of IT investments has been a long-standing challenge in the federal government. In particular, the federal government has spent billions of dollars on failed and poorly performing IT investments, which often suffered from ineffective management. Moreover, spending on IT operations has been inefficient. In light of these ongoing challenges, in February 2015, we added improving the management of IT acquisitions and operations to our list of high-risk areas for the federal government.[2]

My statement today discusses agencies' progress in improving the management of IT acquisitions and operations. To do so, we reviewed and summarized our prior and recently published work on (1) data center consolidation, (2) risk levels of major investments as reported on the Office of Management and Budget's (OMB) IT Dashboard, and (3) implementation of incremental development practices. A more detailed discussion of the objectives, scope, and methodology for this work is included in each of the reports that are cited throughout this statement.[3]

We conducted the work on which this statement is based in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained

---

[1] Federal Information Technology Acquisition Reform provisions of the Carl Levin and Howard P. 'Buck' McKeon National Defense Authorization Act for Fiscal Year 2015, Pub. L. No. 113-291, div. A, title VIII, subtitle D, 128 Stat. 3292, 3438-3450 (Dec. 19, 2014).

[2] GAO, *High-Risk Series: An Update*, GAO-15-290 (Washington, D.C.: Feb. 11, 2015). GAO maintains a high-risk program to focus attention on government operations that it identifies as high risk due to their greater vulnerabilities to fraud, waste, abuse, and mismanagement or the need for transformation to address economy, efficiency, or effectiveness challenges.

[3] See the related GAO products page at the end of this statement for a list of the reports on which this testimony is based.

GAO-17-263T

provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

The federal government is likely to invest more than $89 billion on IT in fiscal year 2017. However, as we have previously reported, investments in federal IT too often result in failed projects that incur cost overruns and schedule slippages, while contributing little to the desired mission-related outcomes. For example:

- The Department of Veterans Affairs' Scheduling Replacement Project was terminated in September 2009 after spending an estimated $127 million over 9 years.[4]

- The tri-agency[5] National Polar-orbiting Operational Environmental Satellite System was stopped in February 2010 by the White House's Office of Science and Technology Policy after the program spent 16 years and almost $5 billion.[6]

- The Department of Homeland Security's Secure Border Initiative Network program was ended in January 2011, after the department obligated more than $1 billion to the program, because it did not meet cost-effectiveness and viability standards.[7]

---

[4]GAO, *Information Technology: Management Improvements Are Essential to VA's Second Effort to Replace Its Outpatient Scheduling System,* GAO-10-579 (Washington, D.C.: May 27, 2010).

[5]The weather satellite program was managed by the National Oceanic and Atmospheric Administration, the Department of Defense, and the National Aeronautics and Space Administration.

[6]See, for example, GAO, *Polar-Orbiting Environmental Satellites: With Costs Increasing and Data Continuity at Risk, Improvements Needed in Tri-agency Decision Making,* GAO-09-564 (Washington, D.C.: June 17, 2009) and *Environmental Satellites: Polar-Orbiting Satellite Acquisition Faces Delays; Decisions Needed on Whether and How to Ensure Climate Data Continuity,* GAO-08-518 (Washington, D.C.: May 16, 2008).

[7]See, for example, GAO, *Secure Border Initiative: DHS Needs to Strengthen Management and Oversight of Its Prime Contractor,* GAO-11-6 (Washington, D.C.: Oct. 18, 2010); *Secure Border Initiative: DHS Needs to Reconsider Its Proposed Investment in Key Technology Program,* GAO-10-340 (Washington, D.C.: May 5, 2010); and *Secure Border Initiative: DHS Needs to Address Testing and Performance Limitations That Place Key Technology Program at Risk,* GAO-10-158 (Washington, D.C.: Jan. 29, 2010).

- The Office of Personnel Management's Retirement Systems Modernization program was canceled in February 2011, after spending approximately $231 million on the agency's third attempt to automate the processing of federal employee retirement claims.[8]

- The Department of Veterans Affairs' Financial and Logistics Integrated Technology Enterprise program was intended to be delivered by 2014 at a total estimated cost of $609 million, but was terminated in October 2011 due to challenges in managing the program.[9]

- The Department of Defense's Expeditionary Combat Support System was canceled in December 2012 after spending more than a billion dollars and failing to deploy within 5 years of initially obligating funds.[10]

These and other failed IT projects often suffered from a lack of disciplined and effective management, such as project planning, requirements definition, and program oversight and governance. In many instances, agencies had not consistently applied best practices that are critical to successfully acquiring IT investments.

Federal IT projects have also failed due to a lack of oversight and governance. Executive-level governance and oversight across the government has often been ineffective, specifically from chief information officers (CIO). For example, we have reported that not all CIOs had the

---

[8]See, for example, GAO, *Office of Personnel Management: Retirement Modernization Planning and Management Shortcomings Need to Be Addressed,* GAO-09-529 (Washington, D.C.: Apr. 21, 2009) and *Office of Personnel Management: Improvements Needed to Ensure Successful Retirement Systems Modernization,* GAO-08-345 (Washington, D.C.: Jan. 31, 2008).

[9]GAO, *Information Technology: Actions Needed to Fully Establish Program Management Capability for VA's Financial and Logistics Initiative,* GAO-10-40 (Washington, D.C.: Oct. 26, 2009).

[10]GAO, *DOD Financial Management: Implementation Weaknesses in Army and Air Force Business Systems Could Jeopardize DOD's Auditability Goals,* GAO-12-134 (Washington, D.C.: Feb. 28, 2012) and *DOD Business Transformation: Improved Management Oversight of Business System Modernization Efforts Needed,* GAO-11-53 (Washington, D.C.: Oct. 7, 2010).

authority to review and approve the entire agency IT portfolio and that CIOs' authority was limited.[11]

FITARA Can Improve Agencies' Management of IT

Recognizing the severity of issues related to government-wide management of IT, FITARA was enacted in December 2014. The law was intended to improve agencies' acquisitions of IT and enable Congress to monitor agencies' progress and hold them accountable for reducing duplication and achieving cost savings. FITARA includes specific requirements related to seven areas.

- **Federal data center consolidation initiative (FDCCI)**. Agencies are required to provide OMB with a data center inventory, a strategy for consolidating and optimizing the data centers (to include planned cost savings), and quarterly updates on progress made. The law also requires OMB to develop a goal for how much is to be saved through this initiative, and provide annual reports on cost savings achieved.

- **Enhanced transparency and improved risk management**. OMB and agencies are to make detailed information on federal IT investments publicly available, and agency CIOs are to categorize their IT investments by level of risk. Additionally, in the case of major IT investments rated as high risk for 4 consecutive quarters, the law requires that the agency CIO and the investment's program manager conduct a review aimed at identifying and addressing the causes of the risk.

- **Agency CIO authority enhancements**.[12] Agency CIOs are required to (1) approve the IT budget requests of their respective agencies, (2) certify that OMB's incremental development guidance is being adequately implemented for IT investments, (3) review and approve contracts for IT, and (4) approve the appointment of other agency employees with the title of CIO.

- **Portfolio review**. Agencies are to annually review IT investment portfolios in order to, among other things, increase efficiency and

---

[11]GAO, *Federal Chief Information Officers: Opportunities Exist to Improve Role in Information Technology Management*, GAO-11-634 (Washington, D.C.: Sept. 15, 2011).

[12]The provisions apply to the agencies covered by the Chief Financial Officers Act of 1990, 31 U.S.C. § 901(b), except that the Department of Defense is largely exempted from this and other requirements.

effectiveness and identify potential waste and duplication. In establishing the process associated with such portfolio reviews, the law requires OMB to develop standardized performance metrics, to include cost savings, and to submit quarterly reports to Congress on cost savings.

- **Expansion of training and use of IT acquisition cadres**. Agencies are to update their acquisition human capital plans to address supporting the timely and effective acquisition of IT. In doing so, the law calls for agencies to consider, among other things, establishing IT acquisition cadres or developing agreements with other agencies that have such cadres.

- **Government-wide software purchasing program**. The General Services Administration is to develop a strategic sourcing initiative to enhance government-wide acquisition and management of software. In doing so, the law requires that, to the maximum extent practicable, the General Services Administration should allow for the purchase of a software license agreement that is available for use by all executive branch agencies as a single user.

- **Maximizing the benefit of the federal strategic sourcing initiative.** Federal agencies are required to compare their purchases of services and supplies to what is offered under the federal strategic sourcing initiative. OMB is also required to issue related regulations.

In June 2015, OMB released guidance describing how agencies are to implement FITARA.[13] OMB's guidance is intended to, among other things:

- assist agencies in aligning their IT resources with statutory requirements;
- establish government-wide IT management controls that will meet the law's requirements, while providing agencies with flexibility to adapt to unique agency processes and requirements;
- clarify the CIO's role and strengthen the relationship between agency CIOs and bureau CIOs; and
- strengthen CIO accountability for IT cost, schedule, performance, and security.

---

[13]OMB, *Management and Oversight of Federal Information Technology*, Memorandum M-15-14 (Washington, D.C.: June 10, 2015).

The guidance identified several actions that agencies were to take to establish a basic set of roles and responsibilities (referred to as the common baseline) for CIOs and other senior agency officials, which are needed to implement the authorities described in the law. For example, agencies were required to conduct a self-assessment and submit a plan describing the changes they intended to make to ensure that common baseline responsibilities are implemented. Agencies were to submit their plans to OMB's Office of E-Government and Information Technology by August 15, 2015, and make portions of the plans publicly available on agency websites no later than 30 days after OMB approval. As of November 2016, all agencies had made their plans publicly available.

In addition, in August 2016, OMB released guidance intended to, among other things, define a framework for achieving the data center consolidation and optimization requirements of FITARA.[14] The guidance includes requirements for agencies to:

- maintain complete inventories of all data center facilities owned, operated, or maintained by or on behalf of the agency;
- develop cost savings targets due to consolidation and optimization for fiscal years 2016 through 2018 and report any actual realized cost savings; and
- measure progress toward meeting optimization metrics on a quarterly basis.

The guidance also directs agencies to develop a data center consolidation and optimization strategic plan that defines the agency's data center strategy for fiscal years 2016, 2017, and 2018. This strategy is to include, among other things, a statement from the agency CIO stating whether the agency has complied with all data center reporting requirements in FITARA. Further, the guidance indicates that OMB is to maintain a public dashboard that will display consolidation-related costs savings and optimization performance information for the agencies.

---

[14]OMB, *Data Center Optimization Initiative (DCOI)*, Memorandum M-16-19 (Washington D.C.: Aug. 1, 2016).

IT Acquisitions and Operations Identified by GAO as a High-Risk Area

In February 2015, we introduced a new government-wide high-risk area, *Improving the Management of IT Acquisitions and Operations.*[15] This area highlights several critical IT initiatives in need of additional congressional oversight, including (1) reviews of troubled projects; (2) efforts to increase the use of incremental development; (3) efforts to provide transparency relative to the cost, schedule, and risk levels for major IT investments; (4) reviews of agencies' operational investments; (5) data center consolidation; and (6) efforts to streamline agencies' portfolios of IT investments. We noted that implementation of these initiatives has been inconsistent and more work remains to demonstrate progress in achieving IT acquisitions and operations outcomes.

Further, in our February 2015 high-risk report, we identified actions that OMB and the agencies need to take to make progress in this area. These include implementing FITARA, as well as implementing at least 80 percent of our recommendations related to the management of IT acquisitions and operations within 4 years. As noted in that report, we made multiple recommendations to improve agencies' management of IT acquisitions and operations, many of which are discussed later in this statement. Specifically, between fiscal years 2010 and 2015, we made 803 recommendations to OMB and federal agencies to address shortcomings in IT acquisitions and operations, including many to improve the implementation of the recent initiatives and other government-wide, cross-cutting efforts.

As of October 2016, OMB and the agencies had fully implemented about 46 percent of these recommendations. This is a 23 percent increase compared to the percentage we reported as being fully implemented in 2015. Figure 1 summarizes the progress that OMB and the agencies have made in addressing our recommendations, as compared to the 80 percent target.

[15]GAO-15-290.

Figure 1: Summary of the Office of Management and Budget's and Agencies' Progress in Addressing GAO's Recommendations

Implementation of GAO's prior recommendations

The Office of Management and Budget's and agencies' implementation of GAO's prior recommendations related to the management of information technology acquisitions and operations
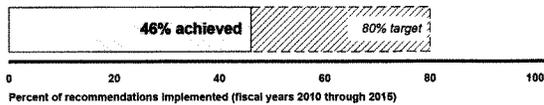
Percent of recommendations implemented (fiscal years 2010 through 2015)

Source: Office of Management and Budget and agency data. | GAO-17-263T

In addition, in fiscal year 2016, we made 202 new recommendations, thus further reinforcing the need for OMB and agencies to address the shortcomings in IT acquisitions and operations.

Full Implementation of FITARA Needed to Improve IT Management

Agencies have taken steps to improve the management of IT acquisitions and operations by implementing key FITARA initiatives. However, agencies would be better positioned to fully implement the law, and thus realize additional management improvements, if they addressed the numerous recommendations we have made aimed at improving data center consolidation, increasing transparency via OMB's IT Dashboard, and incremental development.

Agencies Have Made Progress in Consolidating Data Centers, but Need to Take Action to Achieve Planned Cost Savings

One of the key initiatives to implement FITARA is data center consolidation. OMB established FDCCI in February 2010 to improve the efficiency, performance, and environmental footprint of federal data center activities. In a series of reports over the past 5 years, we determined that while data center consolidation could potentially save the federal government billions of dollars, weaknesses existed in several areas, including agencies' data center consolidation plans and OMB's

18

tracking and reporting on cost savings.[16] In total, we have made 111 recommendations to OMB and agencies to improve the execution and oversight of the initiative. Most agencies agreed with our recommendations or had no comments.

In March 2016, we reported[17] that the 24 agencies[18] participating in FDCCI collectively had made progress on their data center closure efforts. Specifically, as of November 2015, these agencies had identified a total of 10,584 data centers, of which they reported closing 3,125 through fiscal year 2015. Notably, the Departments of Agriculture, Defense, the Interior, and the Treasury accounted for 84 percent of these total closures. Further, the agencies have reported that they are planning to close additional data centers by the end of fiscal year 2019.

In addition, we noted that 19 of the 24 agencies had reported achieving an estimated $2.8 billion in cost savings and avoidances from their data center consolidation and optimization efforts from fiscal years 2011 through 2015. The Departments of Commerce, Defense, Homeland Security, and the Treasury accounted for about $2.4 billion (or about 86 percent) of the total. Further, 21 agencies collectively reported planning an additional $5.4 billion in cost savings and avoidances, for a total of

[16]GAO, *Data Center Consolidation: Reporting Can Be Improved to Reflect Substantial Planned Savings*, GAO-14-713 (Washington, D.C.: Sept. 25, 2014); *Data Center Consolidation: Strengthened Oversight Needed to Achieve Cost Savings Goal*, GAO-13-378 (Washington, D.C.: Apr. 23, 2013); *Data Center Consolidation: Agencies Making Progress on Efforts, but Inventories and Plans Need to Be Completed*, GAO-12-742 (Washington, D.C.: July 19, 2012); and *Data Center Consolidation: Agencies Need to Complete Inventories and Plans to Achieve Expected Savings*, GAO-11-565 (Washington, D.C.: July 19, 2011).

[17]GAO, *Data Center Consolidation: Agencies Making Progress, but Planned Savings Goals Need to Be Established [Reissued on March 4, 2016]*, GAO-16-323 (Washington, D.C.: Mar. 3, 2016).

[18]The 24 agencies that FITARA requires to participate in FDCCI are the Departments of Agriculture, Commerce, Defense, Education, Energy, Health and Human Services, Homeland Security, Housing and Urban Development, the Interior, Justice, Labor, State, Transportation, the Treasury, and Veterans Affairs; the Environmental Protection Agency; General Services Administration; National Aeronautics and Space Administration; National Science Foundation; Nuclear Regulatory Commission; Office of Personnel Management; Small Business Administration; Social Security Administration; and U.S. Agency for International Development.

approximately \$8.2 billion, through fiscal year 2019.[19] Figure 2 summarizes agencies' reported achieved and planned cost savings and avoidances from fiscal years 2011 through 2019.

Figure 2: Agency-reported Data Center Consolidation Cost Savings and Avoidances (Fiscal Years 2011 – 2019), as of December 2015

Dollars in billions

Fiscal years
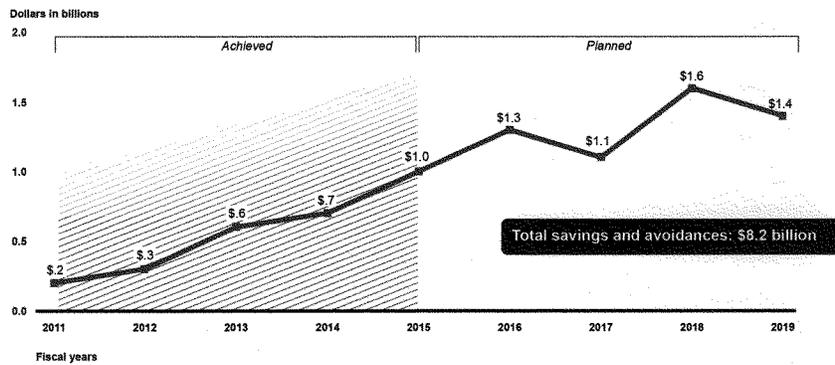
Source: GAO analysis of agency data. | GAO-17-263T

To better ensure that federal data center consolidation and optimization efforts improve governmental efficiency and achieve cost savings, we recommended that 10 of the 24 agencies take actions to complete their planned data center cost savings and avoidance targets for fiscal years 2016 through 2018. We also recommended that 22 of the 24 agencies take actions to improve optimization progress, including addressing any identified challenges. Fourteen agencies agreed with our recommendations, 4 did not state whether they agreed or disagreed, and 6 stated that they had no comments.

[19] We have ongoing work to further assess agencies' cost savings and avoidances from data center consolidation and optimization efforts.

Risks Need to Be Fully Considered When Agencies Rate Their Major Investments on OMB's IT Dashboard

To facilitate transparency across the government in acquiring and managing IT investments, OMB established a public website—the IT Dashboard—to provide detailed information on major investments at 26 agencies, including ratings of their performance against cost and schedule targets. Among other things, agencies are to submit ratings from their CIOs, which, according to OMB's instructions, should reflect the level of risk facing an investment relative to that investment's ability to accomplish its goals. In this regard, FITARA includes a requirement for CIO's to categorize their major IT investment risks in accordance with OMB guidance.[20]

Over the past 6 years, we have issued a series of reports about the IT Dashboard that noted both significant steps OMB has taken to enhance the oversight, transparency, and accountability of federal IT investments by creating its IT Dashboard, as well as issues with the accuracy and reliability of data.[21] In total, we have made 47 recommendations to OMB and federal agencies to help improve the accuracy and reliability of the information on the IT Dashboard and to increase its availability. Most agencies agreed with our recommendations or had no comments.

Most recently, in June 2016, we determined that agencies had not fully considered risks when rating their major investments on the IT Dashboard. Specifically, our assessments of risk for 95 investments at 15 selected agencies[22] matched the CIO ratings posted on the Dashboard 22 times, showed more risk 60 times, and showed less risk 13 times.

---

[20]40 U.S.C. § 11302(c)(3)(C).

[21]GAO, *IT Dashboard: Agencies Need to Fully Consider Risks When Rating Their Major Investments,* GAO-16-494 (Washington, D.C.: June 2, 2016); *IT Dashboard: Agencies Are Managing Investment Risk, but Related Ratings Need to Be More Accurate and Available,* GAO-14-64 (Washington, D.C.: Dec. 12, 2013); *IT Dashboard: Opportunities Exist to Improve Transparency and Oversight of Investment Risk at Select Agencies,* GAO-13-98 (Washington, D.C.: Oct. 16, 2012); *IT Dashboard: Accuracy Has Improved, and Additional Efforts Are under Way to Better Inform Decision Making,* GAO-12-210 (Washington, D.C.: Nov. 7, 2011); *Information Technology: OMB Has Made Improvements to Its Dashboard, but Further Work Is Needed by Agencies and OMB to Ensure Data Accuracy,* GAO-11-262 (Washington, D.C.: Mar. 15, 2011); and *Information Technology: OMB's Dashboard Has Increased Transparency and Oversight, but Improvements Needed,* GAO-10-701 (Washington, D.C.: July 16, 2010).

[22]The 15 selected agencies were the Departments of Agriculture, Commerce, Defense, Education, Energy, Health and Human Services, Homeland Security, the Interior, State, Transportation, the Treasury, and Veterans Affairs; the Environmental Protection Agency; General Services Administration; and Social Security Administration.

Figure 3 summarizes how our assessments compared to the selected investments' CIO ratings.

Figure 3: Comparison of Selected Investments' April 2015 Chief Information Officer Ratings to GAO's Assessments
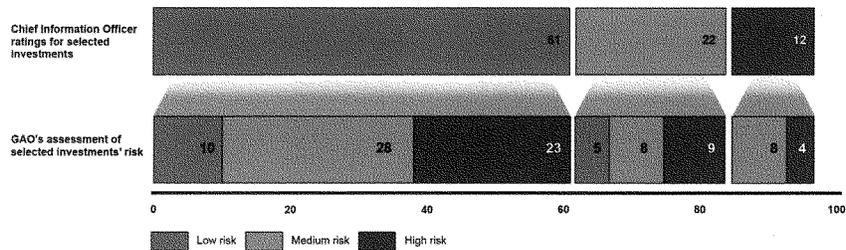
Source: GAO's assessment of data from the Office of Management and Budget's Information Technology Dashboard. | GAO-17-263T

Aside from the inherently judgmental nature of risk ratings, we identified three factors which contributed to differences between our assessments and the CIO ratings:

- Forty of the 95 CIO ratings were not updated during the month we reviewed, which led to more differences between our assessments and the CIOs' ratings. This underscores the importance of frequent rating updates, which help to ensure that the information on the Dashboard is timely and accurately reflects recent changes to investment status.

- Three agencies' rating processes spanned longer than 1 month. Longer processes mean that CIO ratings are based on older data, and may not reflect the current level of investment risk.

- Seven agencies' rating processes did not focus on active risks. According to OMB's guidance, CIO ratings should reflect the CIO's assessment of the risk and the investment's ability to accomplish its goals. CIO ratings that do no incorporate active risks increase the chance that ratings overstate the likelihood of investment success.

As a result, we concluded that the associated risk rating processes used by the agencies were generally understating the level of an investment's risk, raising the likelihood that critical federal investments in IT are not receiving the appropriate levels of oversight. To better ensure that the

Dashboard ratings more accurately reflect risk, we recommended that the 15 agencies[23] take actions to improve the quality and frequency of their CIO ratings. Twelve agencies generally agreed with or did not comment on the recommendations and three agencies disagreed.

Agencies Need to Increase Their Use of Incremental Development Practices

OMB has emphasized the need to deliver investments in smaller parts, or increments, in order to reduce risk, deliver capabilities more quickly, and facilitate the adoption of emerging technologies. In 2010, it called for agencies' major investments to deliver functionality every 12 months and, since 2012, every 6 months. Subsequently, FITARA codified a requirement that agency CIOs certify that IT investments are adequately implementing OMB's incremental development guidance.[24]

In May 2014, we reported[25] that 66 of 89 selected investments at five major agencies[26] did not plan to deliver capabilities in 6-month cycles, and less than half of these investments planned to deliver functionality in 12-month cycles. We also reported that only one of the five agencies had complete incremental development policies. Accordingly, we recommended that OMB develop and issue clearer guidance on incremental development and that the selected agencies update and implement their associated policies. Four of the six agencies agreed with our recommendations or had no comments; the remaining two agencies partially agreed or disagreed with the recommendations.

More recently, in August 2016, we reported that agencies had not fully implemented incremental development practices for their software development projects. Specifically, we noted that, as of August 31, 2015,

---

[23]These 15 agencies are the Departments of Agriculture, Commerce, Defense, Education, Energy, Health and Human Services, Homeland Security, the Interior, State, Transportation, the Treasury, and Veterans Affairs; the Environmental Protection Agency, Office of Personnel Management; and Social Security Administration.

[24]40 U.S.C. § 11319(b)(1)(B)(ii).

[25]GAO, *Information Technology: Agencies Need to Establish and Implement Incremental Development Policies*, GAO-14-361 (Washington, D.C.: May 1, 2014).

[26]These five agencies are the Departments of Defense, Health and Human Services, Homeland Security, Transportation, and Veterans Affairs.

22 federal agencies[27] had reported on the IT Dashboard that 300 of 469 active software development projects (approximately 64 percent) were planning to deliver usable functionality every 6 months for fiscal year 2016, as required by OMB guidance. Regarding the remaining 169 projects (or 36 percent) that were reported as not planning to deliver functionality every 6 months, agencies provided a variety of explanations for not achieving that goal. These included project complexity, the lack of an established project release schedule, or that the project was not a software development project. Table 1 lists the total number and percent of federal software development projects for which agencies reported plans to deliver functionality every 6 months for fiscal year 2016.

[27]These 22 agencies are the Departments of Agriculture, Commerce, Defense, Education, Energy, Health and Human Services, Homeland Security, Housing and Urban Development, the Interior, Justice, Labor, State, Transportation, the Treasury, and Veterans Affairs; the Environmental Protection Agency, General Services Administration, National Archives and Records Administration, Office of Personnel Management, Small Business Administration, Social Security Administration, and U.S. Agency for International Development.

Table 1: Federal Agency Software Development Projects that Plan to Deliver Functionality Every 6 Months for Fiscal Year 2016, as Reported on the Information Technology (IT) Dashboard

Agency	Number of major IT investments	Number of projects associated with investments	Number of projects planning delivery of release every 6 months	Percent planning release every 6 months
Department of Veterans Affairs	10	95	95	100%
Department of Commerce	9	84	78	93%
Department of Health and Human Services	18	48	42	88%
Department of Education	12	14	11	79%
Department of the Treasury	12	28	18	64%
Department of Homeland Security	13	23	13	57%
Social Security Administration	9	24	12	50%
Department of Transportation	20	60	5	8%
Department of Defense	36	51	4	8%
All other federal agencies[a]	30	42	22	52%
Total	**169**	**469**	**300**	**64%**

Source: GAO analysis of Federal IT Dashboard data as of August 31, 2015. I GAO-17-263T

[a]Thirteen additional agencies each reported having at least one major IT investment and a total of 20 or fewer projects. For these agencies, we combined the total number of investment because calculating a percent of functionality delivered for each agency's small number of projects would not provide a reliable figure.

In reviewing seven selected agencies'[28] software development projects, we determined that 45 percent of the projects delivered functionality every 6 months for fiscal year 2015 and 55 percent planned to do so in fiscal year 2016. However, significant differences existed between the delivery rates that the agencies reported to us and what they reported on the IT Dashboard. For example, in four cases (Commerce, Education, HHS, and Treasury), the percentage of delivery reported to us was at least 10 percentage points lower than what was reported on the IT Dashboard. These differences were due to (1) our identification of fewer software development projects than agencies reported on the IT Dashboard and (2) the fact that information reported to us was generally more current

---

[28]These seven agencies are the Departments of Commerce, Defense, Education, Health and Human Services, Homeland Security, Transportation, and the Treasury. These agencies were chosen because they reported a minimum of 12 investments that were at least 50 percent or more in development on the IT Dashboard for fiscal year 2015.

than the information reported on the IT Dashboard. Figure 4 compares the software development projects' percentage of planned delivery every 6 months reported on the IT Dashboard and to us.

Figure 4: Comparison of Software Development Projects' Percentage of Planned Delivery Every 6 Months Reported on Information Technology (IT) Dashboard and to GAO for Fiscal Year 2016

Percentage of software development projects planning to deliver a release every 6 months in fiscal year 2016

Reported on the Information Technology Dashboard

Reported to GAO

Source: GAO analysis of department data. | GAO-17-263T
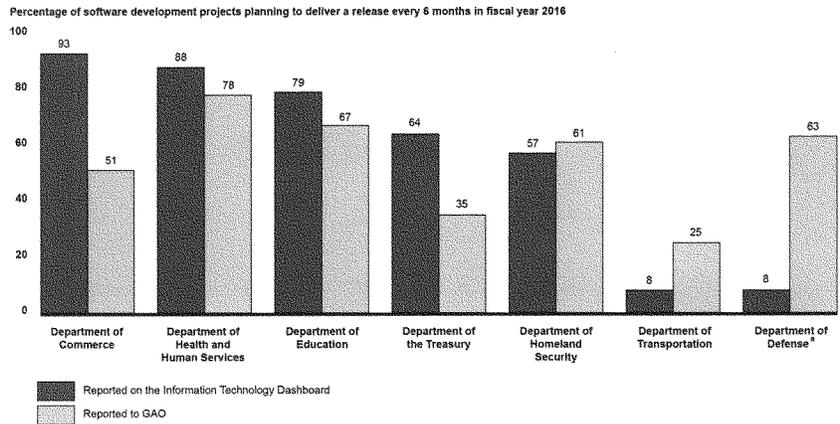
[a]The Department of Defense did not provide the requested information in time to verify the information reported for a sample of projects.

We concluded that by not having on the IT Dashboard up-to-date information about whether the project is a software development project and the extent to which projects are delivering functionality, these seven agencies were at risk that OMB and key stakeholders may make decisions regarding the agencies' investments without the most current and accurate information.

Finally, while OMB has issued guidance requiring agency CIOs to certify that each major IT investment's plan for the current year adequately implements incremental development, only three agencies (the Departments of Commerce, Homeland Security, and Transportation) had

defined processes and policies intended to ensure that the department CIO certifies that major IT investments are adequately implementing incremental development.[29] Officials from three other agencies (the Departments of Education, Health and Human Services, and the Treasury) reported that they were in the process of updating their existing incremental development policy to address certification, while the Department of Defense's policies that address incremental development did not include information on CIO certification. We concluded that until all of the agencies we reviewed define processes and policies for the certification of the adequate use of incremental development, they will not be able to fully ensure adequate implementation of, or benefit from, incremental development practices, as required by FITARA.

To improve the reporting of incremental data on the IT Dashboard and policies for CIO certification of adequate incremental development, we made 12 recommendations to seven agencies and OMB. Five agencies agreed with our recommendations. In addition, the Department of Defense partially agreed with one recommendation and disagreed with another, OMB did not agree or disagree, and the Department of the Treasury did not comment on the recommendations.

In summary, with the enactment of FITARA, the federal government has an opportunity to improve the transparency and management of IT acquisitions and operations, and to strengthen the authority of CIOs to provide needed direction and oversight. To their credit, agencies have taken steps to improve the management of IT acquisitions and operations by implementing key FITARA initiatives, including data center consolidation, efforts to increase transparency via OMB's IT Dashboard, and incremental development; and they have continued to address recommendations we have made over the past several years. However, additional improvements are needed, and further efforts by OMB and federal agencies to implement our previous recommendations would better position them to fully implement FITARA. To help ensure that these efforts succeed, continued congressional oversight of OMB's and agencies' implementation of FITARA is essential. In addition, we will continue to monitor agencies implementation of our previous recommendations.

---

[29]Office of Management and Budget, *FY2017 IT Budget – Capital Planning Guidance.*

27

Chairmen Meadows and Hurd, Ranking Members Connolly and Kelly, and Members of the Subcommittees, this completes my prepared statement. I would be pleased to respond to any questions that you may have at this time.

28

GAO Contacts and Staff Acknowledgments

Related GAO Products

Information Technology Reform: Agencies Need to Increase Their Use of Incremental Development Practices, GAO-16-469. Washington, D.C.: August 16, 2016.

IT Dashboard: Agencies Need to Fully Consider Risks When Rating Their Major Investments, GAO-16-494. Washington, D.C.: June 2, 2016.

Data Center Consolidation: Agencies Making Progress, but Planned Savings Goals Need to Be Established [Reissued on March 4, 2016]. GAO-16-323. Washington, D.C.: March 3, 2016.

High-Risk Series: An Update. GAO-15-290. Washington, D.C.: February 11, 2015.

Data Center Consolidation: Reporting Can Be Improved to Reflect Substantial Planned Savings. GAO-14-713. Washington, D.C.: September 25, 2014.

Information Technology: Agencies Need to Establish and Implement Incremental Development Policies. GAO-14-361. Washington, D.C.: May 1, 2014.

IT Dashboard: Agencies Are Managing Investment Risk, but Related Ratings Need to Be More Accurate and Available. GAO-14-64. Washington, D.C.: December 12, 2013.

Data Center Consolidation: Strengthened Oversight Needed to Achieve Cost Savings Goal. GAO-13-378. Washington, D.C.: April 23, 2013.

Information Technology Dashboard: Opportunities Exist to Improve Transparency and Oversight of Investment Risk at Select Agencies. GAO-13-98. Washington, D.C.: October 16, 2012.

Data Center Consolidation: Agencies Making Progress on Efforts, but Inventories and Plans Need to Be Completed. GAO-12-742. Washington, D.C.: July 19, 2012.

IT Dashboard: Accuracy Has Improved, and Additional Efforts Are Under Way to Better Inform Decision Making. GAO-12-210. Washington, D.C.: November 7, 2011.

30

Data Center Consolidation: Agencies Need to Complete Inventories and Plans to Achieve Expected Savings. GAO-11-565. Washington, D.C.: July 19, 2011.

Federal Chief Information Officers: Opportunities Exist to Improve Role in Information Technology Management. GAO-11-634. Washington, D.C.: September 15, 2011.

Information Technology: OMB Has Made Improvements to Its Dashboard, but Further Work Is Needed by Agencies and OMB to Ensure Data Accuracy. GAO-11-262. Washington, D.C.: March 15, 2011.

Information Technology: OMB's Dashboard Has Increased Transparency and Oversight, but Improvements Needed. GAO-10-701. Washington, D.C.: July 16, 2010.

Mr. WALBERG. I thank the gentleman.

And now I recognize Mr. Fulghum for your 5 minutes of testimony.

STATEMENT OF THE HONORABLE CHIP FULGHUM

Mr. FULGHUM. Chairman Walberg, Ranking Member Kelly, Ranking Member Connolly, and members of the subcommittee, thank you for the opportunity to talk to you today about the progress the Department of Homeland Security has made in implementing FITARA. First, I'd like to say how proud I am of the expertise and hard work of our employees, who have taken many steps to ensure that FITARA is fully implemented.

It is my privilege to serve with such dedicated folks. I'm proud to say that there is a true collaboration between myself and Mr. McCormack who is a recognized leader in the Federal CIO community. In addition, we also work closely with the CIOs and CFOs at our components to increase integration throughout the agency.

While we're pleased with our progress, we recognize much more needs to be done to mature and strengthen our process. Since the Department was stood up, we've been working toward greater integration, transparency, and effectiveness of our IT systems. For example, we have tracked IT investment in our system of records since 2010 and worked closely with the CIO on several major initiatives to improve the health of our IT infrastructure. We saved money by focusing on more efficient ways of doing business, consolidating when it makes sense, and making strategic sourcing a priority.

I applaud FITARA for reinforcing good government principles, ensuring accountability, and reenergizing our efforts. IT is a critical important aspect of the DHS mission space, and we are committing to get an A on the scorecard. With your continued support and working together across the Department, we'll get to the top of the class.

To improve, we will continue to incorporate and empower the CIO in our resource planning and programming actions. IT is a critical part of the DHS operation and touches most programs. As such, CIO's input and insights are necessary throughout the planning, programming, budgeting, and execution process.

The CIO exercises a significant role in resource decisionmaking for all programs that include IT resources, and we will continue to strengthen that role. This is also codified in our Department's management directives.

During our annual program and budget review, component CFOs and CIOs jointly provide a complete picture of IT spending and their component. These inputs are aggregated at the Department level in order to provide senior leadership with a comprehensive picture of IT funding needs, making sure we use the most of our limited resources efficiently and effectively.

Under the leadership of the Under Secretary for Management, our integration is not just a close partnership between the CFO and the CIO but also includes a chief human capital officer, chief procurement officer, and the acquisition community both at the headquarters and at the components. The Secretary's Unity of Effort initiative focused our efforts on institutionalizing former proc-

esses, procedures, and operational structures that integrate component strengths in a coordinated effort to protect our homeland. We built a strong foundation through the Unity of Effort, and we'll use that foundation to keep making improvements in the Department's operations as well as its management.

Our CIO will continue to be consulted in any and all situations where needed. Whether it's an issue to be negotiated between the lines of business or components or a topic that requires the Secretary's attention, our CIO is always a full and trusted participant in any discussion that has an IT element. Our CFO and CIO counsels work in close cooperation all year long, not just at budget time.

Ultimately, we're institutionalizing how our lines of business work together to strengthen resource requests and demonstrate links to mission outcomes. Although we've made significant progress, we will continue to collaborate closely across communities to further strengthen our ability to properly manage the Department's IT portfolio. We fully recognize that IT is foundational to the success of our mission.

Thank you, and I welcome the opportunity to answer any questions you may have.

[Prepared statement of Mr. Fulghum follows:]

TESTIMONY OF

Chip Fulghum

Deputy Under Secretary for Management and Chief Financial Officer

U.S. Department of Homeland Security

and

Luke McCormack

Chief Information Officer

U.S. Department of Homeland Security

BEFORE THE

House Oversight and Government Reform

Subcommittee on Information Technology and Government Operations, and

Subcommittee on Government Operations

December 06, 2016

Introduction

Thank you Chairman Meadows and Chairman Hurd, Ranking Member Kelly and Ranking Member Connolly, and members of the subcommittees for the opportunity to appear before you today to share the Department of Homeland Security's progress on implementation of the Federal Information Technology Acquisition Reform Act (FITARA). I would also like to thank you for your continued support, governance, and commitment to achieving the goals of FITARA.

FITARA at DHS

DHS's mission is to safeguard the American people, our homeland, and our values. Almost every mission and operator under our direction relies on Information Technology (IT) to enable and enhance performance of their critical duties – and this reliance is increasing every day. There are more than 650 major applications and approximately 4,000 total IT systems operating today within the DHS environment. Therefore, for DHS to continue to successfully carry out its mission, we recognize the need to be at the forefront of advancements in IT.

DHS has leveraged FITARA implementation to facilitate positive change within the Department. FITARA gives the Chief Information Officer the authority to weigh in on IT projects much earlier in the budget cycle— when it matters most— while also enabling a clear line of sight across all phases of IT implementation. As DHS continues to institutionalize FITARA, we are confident we will see even greater improvements.

To ensure a comprehensive, deliberate, and lasting application of FITARA principles and practices, DHS utilized a phased implementation approach. In 2015, we laid a substantive foundation through planning, which we followed with rigorous implementation in 2016. We anticipate continued results in 2017 that we will capture through a variety of performance measures.

2015 – Planning Year

In 2015, DHS took the following steps to begin planning for FITARA implementation:

SOPs, Self-Assessment Report, Critical Analysis

As previously mentioned, 2015 was a planning year for FITARA at DHS. From April to August 2015, the DHS OCIO (Office of the Chief Information Officer) reviewed relevant policy documents pertaining to FITARA requirements, supporting Standard Operating Procedures (SOPs) and process artifacts pertaining to Common Baseline practices. The culmination of this effort was a comprehensive self-assessment report and implementation plan submitted to OMB in August 2015 that indicated how well DHS aligned to each core FITARA requirement, identified current gaps, and crafted an action plan outlining how DHS proposes to ensure that all FITARA requirements are fully executed.

In addition to ensuring that DHS complies with FITARA, the DHS FITARA Implementation Team helped drive critical analysis of existing activities that impact how IT investments are selected and managed throughout the agency. This analysis identified needed changes and

improvements to expand DHS CIO visibility and oversight to address short- and long-term objectives.

Revised IT Strategic Plan

The DHS Information Technology Strategic Plan 2015-2018 was updated in January 2015, laying out the Department's progressive IT vision, which were ultimately in strong agreement with the goals and objectives of FITARA. With many FITARA principles already in place, the updated DHS IT Strategic Plan is a reflection of our ever-evolving mission challenges and DHS's coordinated effort to integrate people, processes, technology, information, and governance in a way that efficiently and effectively supports stakeholder needs.

2016 – Implementation Year

This year—2016— was a year of FITARA implementation at DHS. Building upon the many FITARA principles already in place, we entirely changed our approach to doing business, developed FITARA performance metrics, and conducted software acquisition pilots. Our FITARA implementation included the following improvements:

New IT Business Model

DHS OCIO conceptualized a new, customer-centric IT business model, which was implemented in 2015 and brought about initial results throughout 2016. When FITARA was passed, DHS's new model aligned well with its intent. FITARA promotes government savings and efficiency in the procurement of IT through greater visibility and CIO engagement. The consistent demand for rapid delivery of new technologies, coupled with fewer resources and dollars government-wide, prompted the transformation of the DHS IT business model from an "own and operate" legacy approach, to a services-based, customer-centric IT business model. Rather than build our own products, we began to take full advantage of emerging technologies from multiple sources, and develop strategic partnerships with our internal lines of business and industry. This was made possible through the active role the CIO plays in IT capability development and execution.

OCIO Realignment

To lead DHS through the FITARA transformation, we began by strengthening the Office of the Chief Information Officer (OCIO) through a realignment. The Office of the CIO now has two Deputy CIOs, a Chief Technology Officer (CTO), and a Digital Services Team. The Principal Deputy ensures that programs and selected investments are aligned with the DHS IT strategy and the Homeland Security Enterprise Architecture for a unified, efficient and effective use of resources as we build and transform our IT capabilities. The second Deputy CIO has full responsibility over IT operations and service delivery, with the goal of improved procurement and delivery of IT services that ultimately support mission operations across the Department. The CTO is charged with developing the capacity for continuous innovation and improvement across the Department and engineering the "digital transformation" of DHS: leveraging technology, data, and design to optimize operational processes, re-imagine user and customer experience, and empower and engage employees. DHS has also created a Digital Services Team to play a key role in this transformation effort; particularly, how DHS delivers critical IT services to the public and to mission operators.

U.S. Digital Services Playbook

To allow the Department to focus our delivery on driving value to the mission for users at all stages in the lifecycle, the DHS CIO community has adopted the U.S. Digital Services Playbook methodology in support of the OMB Digital Services Playbook. DHS must ensure we are leveraging today's technologies; meaning using open source, cloud, and automation wherever appropriate. The Digital Services Playbook provides a program with proven strategies to increase our agility and flexibility in today's evolving IT field.

Acquisition Pilots

OCIO's Office of the Chief Technology Officer (OCTO) has initiated the software acquisition pilots to improve the acquisition of IT programs. The five programs selected for the pilots were at different stages of development and are now utilizing "Agile" methodologies. These pilots will help the Department define best practices and improve IT acquisition policy and processes.

IT Training/FITARA Staffing Model

DHS is leveraging the implementation of the FITARA to support the new business model through the required assessment and training of the IT workforce. We have made significant progress toward IT workforce goals through collaboration with the Office of the Chief Human Capital Officer (OCHCO). Efforts are underway to identify gaps between current and future skill needs to ensure employees are trained. Additionally, the DHS FITARA Implementation Team established a staffing model that, once finalized and socialized, will provide direction on the staffing needs for FITARA across DHS HQ and the Components.

Recruitment (DHS Cyber and Technology Hiring Fair)

While these gaps are being assessed, the Department is also looking at attrition rates and working to recruit and retain staff with critical skillsets. On July 27 and 28, the Department's CIO, Chief Human Capital Officer, and Chief Security Officer communities partnered with the U.S. Office of Personnel Management Human Resources Solutions (OPM HRS) to support the first-ever Department-wide Cyber and Technology Hiring Fair in the National Capital Region, where DHS demonstrated the various high-profile and cutting-edge job opportunities available. The event was intended to recruit, assess, and select talented individuals for multiple mission-critical positions, and DHS was able to achieve significant economies of scale as well as substantial reductions in time-to-hire through this recruiting event. This two-day event generated more than 14,000 applicants, 2,500 walk-in candidates, and 842 onsite interviews. As a result, the Department made more than 400 prospective job offers. Of this number, over 120 candidates became new employees within sixty days.

CIO Certification of Programs, DHS Agile Instruction and Guidebook, DHS Agile Center of Excellence

DHS has developed OMB guidance on the adoption of an incremental software development methodology and iterative delivery of useable functionality across our portfolio of IT investments, programs and projects. To further comply with FITARA requirements, we are developing a process to provide CIO certification that investments are using incremental development in accordance with the aforementioned principles.

We also published the DHS Agile Instruction and Guidebook in FY 2016, which establishes Agile as the preferred development approach for all IT programs and projects, and we are in the process of implementing it across the enterprise, where appropriate. To support the DHS Agile Instruction and Guidebook and our implementation of Agile, we established the DHS Agile Center of Excellence (COE). The DHS Agile COE provides DHS program and project managers with guidance and resources to successfully support the implementation of Agile IT development.

FITARA Metrics/Performance Measures/FITARA Implementation Maturity Model

DHS has recognized the need for establishing performance measures to demonstrate the improvements generated by FITARA-driven changes. As such, the OCIO has outlined a third phase of the FITARA implementation approach that is focused solely on the development of measures to assess performance and outcomes. DHS is currently participating in a Federal-wide working group to identify FITARA performance metrics and is one of the lead organizations in this important effort. In addition to measuring the impact of FITARA, the Department is developing a FITARA Implementation Maturity Model to measure the implementation of the various processes within DHS Components.

2017 – Results Year

In 2017, we will continue to reap the benefits of the Department's concerted FITARA planning and implementation efforts in 2015 and 2016. We will release an internal DHS FITARA Scorecard that will enable us to closely track FITARA implementation, and we believe it will reflect the emphasis we have placed on successfully integrating CIO visibility and oversight of IT across the DHS mission space.

DHS FITARA Status (successes and challenges)

Continued Successes

DHS has launched efforts on multiple fronts to improve the management of IT acquisitions as well as existing IT systems, positioned itself as a leader in various efficiency initiatives, and stood up the Joint Requirements Council to evaluate high priority, cross-departmental opportunities as part of the Secretary's 2014 Strengthening Departmental Unity of Effort initiative. The Department will sustain its commitment to successfully implementing FITARA through the practices outlined below:

Data Center Consolidation/Optimization

We will continue our consolidation efforts in FY17, having consolidated and closed 41 of 102 (40.2 percent) non-core data centers per the Federal Data Center Consolidation Initiative (FDCCI) inventory. The Department's additional planned consolidation of legacy data center sites will be supported by remaining DHS migration funding.

In response to the August 1, 2016 OMB Data Center Optimization Initiative (DCOI) guidance, DHS is working to optimize data center investment via the DHS Enterprise Computing Services (ECS) concept of converged infrastructure. ECS is a Department-wide contract vehicle designed

to establish a portfolio of Blanket Purchase Agreement(s) for commercial, commodity-based Infrastructure-as-Service (IaaS) cloud services on an ongoing basis. This acquisition provides access to IaaS cloud services, either directly from cloud service providers or through their GSA re-sellers. DHS awarded the Cloud Computing Services contracts on November 30, 2016. The award was made against the GSA Federal Supply Schedule 70 – Electronic Commerce and Subscription Services and Cloud Computing Services.

Risk Assessment Transparency

DHS is in compliance with FITARA for conducting and submitting risk assessments for its major IT investments. Additionally, if any of the Department's 92 major investments rate as high risk for three consecutive months, the OCIO conducts "TechStats" aimed at identifying and addressing the root causes of risk. DHS also performs a comprehensive and collaborative Technical Assessment geared toward reviewing investments' planned technologies, to include an evaluation of the technical maturity of the technology, manufacturing capability, and technical risks. This Technical Assessment is performed early in the acquisition life cycle before CIO approval is granted for a program to procure a technology.

Areas for Improvement

While the Department continues to head in the right direction, we recognize that there is still work remaining to achieve full implementation of FITARA and the goals it was intended to support.

Incremental Development

OCIO is in the process of reaching out to each major program (and supporting programs and projects) to determine whether they are using an incremental methodology for any software development activities, and we will provide appropriate guidance, gap assessment, or other resources to promote incremental development, as appropriate.

IT Portfolio Review Savings

In the five years since DHS implemented PortfolioStat in August 2012, we have realized $1.5 billion in cumulative savings as of the end of FY2016. This includes $1.2 billion in actual reductions in spending below projected levels and $0.3 billion in cost-avoiding changes in business processes. DHS's realized savings are triple the original savings projections of $504 million. We pursued savings by implementing an enterprise approach to the delivery of IT services that actively leveraged strategic sourcing and shared services.

As we begin the next five years, DHS is focusing on adoption and implementation of multi-provider and commercially-provisioned enterprise computing options to rapidly accelerate the maturing of the Federal Cloud Computing Initiative (FCCI), the Federal Risk and Authorization Management Program (FedRAMP), and recent mandates including the FITARA and the Data Center Optimization Initiative (DCOI). This will provide DHS with additional alternatives to increase secure information sharing and collaboration, enhance mission effectiveness, and further reduce the total cost of information technology ownership, operation and sustainment.

Conclusion

DHS looks forward to working with Congress, the Government Accountability Office, and other Federal stakeholders to continue to reduce costs and increase the value of our IT acquisitions through effective and efficient implementation of FITARA. Thank you for the opportunity to share our progress; and we are happy to answer any questions that you may have.

Mr. WALBERG. Thank you, Mr. Fulghum.

I now recognize Mr. McCormack for your testimony.

STATEMENT OF LUKE J. MCCORMACK

Mr. MCCORMACK. Chairman Meadows, Chairman Hurd, Ranking Member Kelly, Ranking Member Connolly, and members of the subcommittee, thank you for the opportunity to appear before you today to share the Department of Homeland Security's progress on implementation of the Federal Information Technology Acquisition Reform Act.

I would like to start by providing you with some key background on the management and oversight of Federal information technology at the Department of Homeland Security. In 2007, DHS instituted the information technology acquisition review process, which enables the DHS CIO to review and effectively guide all agency IT expenditures above $2.5 million to ensure their alignment with DHS missions, goals, policy, and guidelines. In 2011, DHS implemented an enterprise approach to the delivery of IT services that leverage strategic sourcing and shared services.

In 2014, simultaneous with Congress' work on FITARA, the Office of the CIO began to adopt a new IT business model, which was implemented in 2015 and has brought about initial results throughout 2016. Rather than procure, engineer, and implement our own products, we have begun to take advantage of emerging service-based technologies and develop multiple strategy partnerships, including with Federal shared service providers, along with public and private cloud service providers.

This open-market strategy, which fosters continued competition, allows all DHS to gain access to a variety of world-class services while keeping costs low and time to market short. FITARA is helping with all of this.

At DHS, we used a phased implementation approach for FITARA. In 2015, our planning year, the DHS OCIO established a comprehensive self-assessment report that indicated how well DHS aligned to each of the core FITARA requirements, identified current gaps, and outlined how DHS would ensure that all FITARA requirements are fully executed. We also updated the DHS IT strategic plan in 2015, which was in strong agreement with the goals and objectives of FITARA.

This year, 2016, was the year of FITARA implementation at DHS. To lead the Department through the FITARA transformation, we strengthened the Office of the CIO. DHS now has a second deputy CIO, a chief technology officer with elevated responsibilities, and a newly formed DHS digital services team. This talent, which was all obtained from the private sector, has joined our leadership team, and they are playing a key role in transforming how we deliver critical IT services.

FITARA places strong emphasis on maintaining workforce skills in a rapidly developing IT environment and recruiting and retaining IT talent. Efforts are under way at DHS to identify gaps between current and future skill needs to ensure employees are effectively developed. The Department is also looking to maximize the appropriate use of hiring authorities and flexibilities to attract diverse and highly skilled candidates.

On July 27 and 28 of this year, OCIO partnered with both the chief human capital officer and the chief security officer communities across DHS as well as the Office of Personnel Management to support the first ever Department-wide cyber and technology hiring fare. This 2-day event generated more than 14,000 applications, and the Department made more than 400 prospective job offers.

DHS is in compliance with FITARA for conducting and submitting risk assessments for its 92 major IT investments. We proactively support these programs, and if any of them are rated as high risk for 3 consecutive months, we conduct a TechStat accountability session, which is a deep-dive review to address the root cause and get programs back on track.

To advocate incremental development as the preferred development approach for applications and projects, we published the DHS Agile Instruction and Guidebook, established the DHS Agile Center of Excellence, and are in the process of conducting five pilots on programs in various stages of their lifecycle and across multiple DHS operating components. These pilots are helping the Department to mature best practices to ensure we consistently and predictably deliver solutions that meet our mission operator needs. In 2017, we will continue our consolidation efforts, having consolidated and closed 41 of 102 data centers per the Federal Data Center Consolidation Initiative inventory.

We are also working to provide key strategic sourcing vehicles that allow and encourage access to modern technologies and services. Two prime examples are ECS and FLASH. Through Flexible Agile Support for the Homeland, or FLASH, we are able provide DHS components with highly qualified agile teams focused on deploying IT capabilities quickly and securely to support their missions. Enterprise Computing Services, or ACS, is designed to provide easy open-market access to leading cloud technology providers. This will allow for components to purchase infrastructure-as-a-service and platform-as-a-service offerings in order to meet critical infrastructure needs in a flexible and cost-effective fashion. ECS and FLASH form significant building blocks for the Department service delivery model.

In closing, while the Department continues to head in the right direction, we recognize there is still work remaining to achieve full implementation of FITARA. I would like to thank you for your continued support and your commitment to helping us achieve the goals of FITARA. DHS looks forward to working with you and our partners to continue to increase the value of IT acquisitions and better enable our mission through effective and efficient implementation of FITARA. I am happy to answer your questions.

Mr. WALBERG. Thank you, Mr. McCormack.

I now recognize Mr. Wiggins for your testimony.

STATEMENT OF THE HONORABLE FRONTIS B. WIGGINS III

Mr. WIGGINS. Chairman Hurd and Meadows, Vice Chairman Walberg, Ranking Members Kelly and Connolly, and distinguished members, thank you for inviting me to testify before the committee on the Department of State's progress on its Federal Information Technology Acquisition Reform Act implementation.

I want to start by expressing my appreciation for the legislation. FITARA reinforces the Department's longstanding efforts to be collaborative, transparent, and forward-thinking in how we use and acquire information technology. These focus areas are central to how the Department manages IT as a whole.

Today, I would like to share with you how the Department approaches IT management and some recent successes. We will continue our success with the right processes, people, and tools in place, all of which are well aligned with FITARA's provisions. However, we recognize that more can be done, and we will build on these successes and apply lessons learned to overall IT management.

Over the past 5 months in my new role as CIO, I am working to strengthen the established relationships with my peers in acquisitions, human resources, and budget and planning. My focus has been on frequent and open communication, collaboration, and transparency. This approach to IT management helps us address the realities we face with fast-moving technology, risk from cyber threats, and the ongoing need to use our funding wisely.

Like all agencies, we must tailor our IT to best meet our mission needs. We have a distinctive global foreign affairs mission, which is reflected in the Department's organizational structure. Within this environment, we mapped out an approach to FITARA implementation that works best for us.

We work in a global environment, in places no other civilian agency operates, including areas with limited access to Internet. We maintain hundreds of applications and provide around-the-clock IT services, domestically and abroad. We serve 275 posts worldwide, including 24 Federal agencies under Chief of Mission authority.

More than 100,000 computers throughout the world are connected to our networks, and 38,000 mobile devices allow on-demand communications for users globally. We drive the Department's IT programs and resources and maximize value to our users who are increasingly mobile.

We just completed our IT strategic plan for fiscal years 2017 to 2019. We drafted the plan collaboratively with leaders from throughout the Department. This collaboration is not insignificant. It is the foundation for our approach to IT management. Let me provide an example to illustrate how this collaborative approach is benefitting our FITARA implementation.

Our first step to FITARA involved close coordination between the CIO's office and the Bureau of Budget and Planning. We consciously focused on this first because it provides the foundation for budget execution and acquisitions processes. I am proud to highlight that we have made significant progress in intertwining the budgeting process with IT management, both at a high level and at the working level.

My office and the Bureau of Budget and Planning improved visibility and IT spending, for example, and jointly certified the fiscal year 2017 and fiscal year 2018 IT budget submission. Additionally, the Bureau of Budget and Planning has become a regular contributor to our internal FITARA working group meetings, and we have

partnered with them to strengthen guidance for requesting IT resources.

My office also continues to strengthen its relationship with the Office of Acquisition Management within our Bureau of Administration. I work collaboratively with the chief acquisition officer to bring IT management and acquisitions management together through senior-level meetings and through collaboration on IT governance.

The chief acquisition officer also dedicates staff to personally work with us on IT requests. Together, we discuss proposed IT solutions and coordinate with program offices to determine the most appropriate acquisition approaches.

This increasing collaboration, empowered by FITARA, paves the way for strategic sourcing, improved IT management, and even more visibility in how we are using our limited resources. Looking forward, I am committed to building on our successes, applying lessons learned, enhancing our relationships throughout the Department and with our external partners in the spirit of FITARA.

Thank you for your time. I am happy to take any questions you may have.

[Prepared statement of Mr. Wiggins follows:]

DEPARTMENT OF STATE

Testimony of Frontis B. Wiggins
Chief Information Officer
Bureau of Information Resource Management
before the
House Committee on Oversight and Government Reform
Subcommittees on Information Technology and Government Operations
United States House of Representatives
December 6, 2016

Chairmen Hurd and Meadows, Ranking Members Kelly and Connolly, and distinguished members, thank you for inviting me to testify before the committee about the Department of State's progress on its Federal Information Technology Acquisition Reform Act (FITARA) implementation.

I want to start by expressing my appreciation for the legislation. FITARA reinforces the Department's longstanding efforts to be collaborative, transparent, and forward thinking in how we use and acquire information technology (IT). These focus areas are central to how the Department manages IT as a whole.

Today, I would like to share with you how the Department approaches IT management and some recent successes. We will continue our success with the right processes, people, and tools in place – all of which are well aligned with FITARA's provisions. However, we recognize that more can be done and we will build on these successes and apply lessons learned to overall IT management

Over the past five months in my new role as CIO, I am working to strengthen the established relationships with my peers in Acquisitions, Human Resources, and Budget and Planning. My focus has been on frequent and open communication, collaboration, and transparency. This approach to IT management helps us address the realities we face with fast-moving technology, risks from cyber threats, and the ongoing need to use our funding wisely.

UNCLASSIFIED

Like all agencies, we must tailor our IT to best meet our mission needs. We have a distinctive global, foreign affairs mission, which is reflected in the Department's organizational structure. Within this environment, we mapped out an approach to FITARA implementation that works best for us.

We work in a global environment, in places no other civilian agencies operate, including areas with limited access to internet. We maintain hundreds of applications and provide around-the-clock IT services, domestically and abroad. We serve 275 posts worldwide, including 24 federal agencies under Chief of Mission authority. More than 100,000 computers throughout the world are connected to our networks, and 38,000 mobile devices allow on-demand communications for users globally. We drive the Department's IT programs and resources, and maximize value to users who are increasingly mobile.

We also have numerous new federal IT requirements, FITARA being chief among them. I am pleased to talk with you about our implementation efforts today.

OUR IT STRATEGIC PLAN'S ALIGNMENT WITH FITARA

We just completed our IT Strategic Plan for fiscal years (FY) 2017 to 2019. We drafted the plan collaboratively – with leaders from throughout the Department. This collaboration is not insignificant. It is the foundation for our approach to IT management.

We structured the strategic plan into three goals, all with close ties to FITARA implementation. The first goal is to deliver advanced capabilities to foster collaboration, knowledge management, and analytics. The second goal is to provide a robust and secure IT infrastructure that supports on-demand access to information. And the third goal is to advance business management practices to transform service delivery. Since approving this strategic plan, we have launched several additional initiatives to help us strengthen our FITARA efforts.

FITARA IMPLEMENTATION PROGRESS

As I mentioned earlier, our achievements in FITARA implementation and overall IT management are propelled by having the right processes, people, and tools in place. Our early progress in FITARA implementation aligns well in those areas. For example, we have increased input during budget formulation, launched a customer-centric and collaborative process for cloud adoption, planned for the future IT workforce, enhanced cybersecurity, and focused on data center optimization.

Processes: IT Management, Acquisitions, and Budgeting

Our first step to FITARA implementation involved close coordination between the CIO's office and the Bureau of Budget and Planning. We consciously focused on this first because it provides the foundation for budget execution and acquisitions processes.

I am proud to highlight that we have made significant progress in intertwining the budgeting process with IT management, both at a high level and at the working level. We review requested budgets for IT categories, regardless of budget account, and for alignment with established IT goals, architectures, priorities, efficiencies, and performance. As a result of FITARA implementation, my office and the Bureau of Budget and Planning improved visibility into IT spending, and jointly certified the FY 2017 and FY 2018 IT Budget Submission. Additionally, the Bureau of Budget and Planning has become a regular contributor to our internal FITARA working group meetings, and we hav partnered with them to strengthen guidance for requesting IT resources.

My office also continues to strengthen its relationship with the Office of Acquisition Management within our Bureau of Administration. I have worked collaboratively with the Chief Acquisition Officer to bring IT management and acquisitions management together through senior-level meetings and through

collaboration on IT governance. The Chief Acquisition Officer also dedicated staff to personally work with us on IT requests. Together we discuss proposed IT solutions and coordinate with program offices to determine the most appropriate acquisition approaches.

We are also working together to expand our enterprise licensing and strategic sourcing to centralize purchasing and drive down costs. I am pleased to report that several enterprise license agreements are in place, making the acquisition process much more streamlined for our customers and containing costs with data-driven negotiations to get the best value for the Department.

Processes: Customer-Centric and Collaborative Governance Approach

Working together does not just involve our leaders. It involves everyone at the Department, particularly those who manage and use IT products and services. With this in mind, we instituted a new customer-centric, service-based approach.

The Department has a strong IT governance framework, which meets federal mandates, through its Electronic-Government (E-Gov) governance boards. These boards support FITARA objectives in areas such as IT concept and business plan reviews, budget execution, acquisition management, human resources management, security reviews, and expenditures as part of the Department's Capital Planning and Investment Control program. We also establish policies and procedures for IT management.

Through the structure of the E-Gov boards, we foster direct and frequent communication and collaboration among senior officials Department-wide, including those mentioned in the FITARA guidance. Our board membership includes the Under Secretary for Management, CIO, Director of Budget and Planning, Comptroller, Chief Acquisition Officer, and others. Of note, we recently added the Chief Human Capital Officer to the membership to strengthen our IT workforce planning efforts. Together, we work at all levels to

- 5 -

improve management of IT, aligning planning, procurement, and budgeting. Our E-Gov board structure, combined with the implementation of FITARA, helps us make sure our IT spending fits our IT strategic direction and evolving priorities.

I would like to share an example of a new and significant development with roots in FITARA's spirit of collaboration and efficiency. About nine months ago, we stood up a Cloud Computing Governance Board under the E-Gov umbrella. Cloud adoption is a priority here and we want to make sure we do it right, without putting the Department at risk. As a result, we created a collaborative review process to cover all the bases. For each cloud request, senior leaders from information assurance, cybersecurity, privacy, acquisitions, legal, operations, and other offices work together on the review and recommendation. It is true collaboration, and it resulted in strong processes to make sure we're taking advantage of all the benefits cloud use can bring for efficiencies, while balancing any potential risks, and avoiding duplicative purchases.

To prevent IT governance from being purely a compliance exercise, we have adopted a customer-centric approach. We recognize the value in providing our cloud requesters with easy-to-access and understandable information, and direct one-on-one help through the entire approval process. Each request gets a cloud case manager, which reinforces my vision of customer service and transparency.

People: IT Workforce Planning

We rely on our IT professionals to manage our programs to ensure they are efficient, effective, and maximizing the taxpayers' investment. Like other agencies and private sector organizations, we face the challenge of recruiting and retaining these high-caliber IT professionals.

To address this, we have a Strategic Workforce Planning office, which focuses on tackling challenges in recruitment, hiring, training, and development. This office led a recent Foreign Service IT competency study to highlight gaps in professional proficiency. As a result of the study, our Foreign Service Institute's School of Applied Information Technology can provide new training to meet evolving needs. We also launched a program for IT staff to enhance their job experience through rotations with leading private sector technology companies.

We also prioritized key positions. Workforce planning efforts, such as a new enterprise risk officer, have allowed us to bring on, for example, highly skilled cybersecurity experts for our new Cybersecurity Integrity Center that we outlined in our Cybersecurity Strategic Plan.

We are also focusing on improving and hiring talent into the federal government by connecting with the U.S. Digital Service, Presidential Innovation Fellows, General Services Administration's 18F, and expanded hiring authority for all agencies. Building on these efforts, we launched a Smarter IT Fellowship Program to quickly hire and onboard individuals with critical technical skills to advance innovation. Furthermore, we established a Foreign Service IT Fellowship pilot program to provide financial assistance to undergraduate and graduate students who commit to five years of service as Foreign Service IT Specialists. Additionally, we host the Virtual Student Foreign Service program. The State Department, U.S. Agency for International Development, and more than 30 other federal agencies submit projects annually and U.S. college students competitively apply for their top choices.

Tools: Data Center Optimization

We are making progress on both consolidating and optimizing our data centers as part of our FITARA implementation. We maintain four enterprise data centers, but are continuing our efforts to close our leased facility with target

completion in 2018. To facilitate the data center closure, we are consolidating our IT infrastructure into an optimized, geographically dispersed data center. Similarly, modernization efforts are also occurring with the continued installation of modular data center technology, known as MDC. Deployment of MDC allows us to be more flexible with data center resources based on the Department's needs. As we continue to modernize our existing IT infrastructure, we are also maturing our Data Center Optimization Initiative Strategic Plan.

CLOSING

Looking forward, I am committed to building on our successes, applying lessons learned, and enhancing our relationships throughout the Department and with our external partners, in the spirit of FITARA.

Thank you for your time. I am happy to take any questions you may have.

Mr. WALBERG. We thank you, Mr. Wiggins.

And now, Mr. Pitkin, we recognize you.

STATEMENT OF DOUGLAS PITKIN

Mr. PITKIN. Good afternoon. Vice Chairs Walberg and Farenthold, Chairman Hurd and Meadows, Ranking Members Kelly and Connolly, and members of the subcommittees. Thank you for the opportunity to appear before the committee today to provide an update on the Department's implementation of FITARA, particularly on its budget process. As the director of the Bureau of Budget and Planning, I coordinate the development of the Department's annual resource request that the Secretary presents to OMB and Congress each year, and my Bureau is also responsible for overseeing the allocation of funds provided by Congress.

Throughout these efforts, my Bureau has sought to ensure that the CIO and the Bureau of Information Resource Management has both the funding and engagement that it needs to address FITARA.

As reported on the IT Dashboard, the Department's 2017 IT budget request is approximately $1.8 billion. The centerpiece of that investment is our IT central fund, which provides nearly $300 million for the development of enterprise-level systems infrastructure. The remaining 1.5 billion resides in other Department accounts to support both IRM's enterprise-level operation and also Bureau-specific programs.

Both our Bureaus, BP and IRM, continuously seek to improve coordination across the entire span of the IT portfolio. We are committed to transparency and accountability in the management of all aspects of our IT budgets, and this has been greatly enhanced by the partnerships, as Frontis mentioned, between the CIO and IT project and program managers and other bureaus.

I also echo his views on how we have made FITARA implementation work at the Department of State for IT management. From my perspective, FITARA did not superimpose a brandnew budgeting process on the Department, rather helped codify and strengthen existing IT management principles and reinforce ongoing coordination efforts between our offices.

As an example of this collaboration, in forming the fiscal year 2017 budget, my Bureau leveraged the CIO's project performance and schedule information to help us jointly determine the appropriate funding needed to support the Department's electronic health records management project. This ongoing collaboration has and will enable us to make better informed resource decisions, manage IT investment risk, and most importantly, deliver IT services and capabilities that support the Department's mission.

My Bureau has also worked with the CIO's office to include FITARA requirements at our annual budget formulation guidance, which has improved Bureau supporting documentation for IT funding, which now includes more analysis of cost-effectiveness and long-term planning in Bureau IT requests.

Further, over the entire fiscal year, my Bureau works closely with the CIO's team to review IT funding allocations and actual spending, especially for major IT investments. Our goal is to reduce duplication of efforts, share technology across the Department, and deliver best value for the taxpayer.

In support of this effort, my Bureau is looking at how we can further improve the transparency of IT budgets with the CIO. As part of our Bureau's budget system modernization project, we'll be implementing a commercial off-the-shelf product to track our IT assets and costs in all phases of the project lifecycle from formulation to financial plan and including performance metrics as determined by the CIO. This will improve the integration of IT portfolio management data and budget data, would also promote information sharing across the IT enterprise, foster more informed management decisions, and help us do both of our jobs more effectively.

With Congress' continued support and robust collaboration with our Federal and non-Federal stakeholders, we believe we are on a path toward improved FITARA implementation at the Department. We look forward to working with Congress to ensure that our efforts not only comply with FITARA but also reflect our collective desire to transform how the Department does its business both domestically and overseas.

Thank you for your time, and I'm happy to answer any questions.

[Prepared statement of Mr. Pitkin follows:]

DEPARTMENT OF STATE

Testimony of Doug Pitkin
Director of Bureau of Budget and Planning
before the
House Committee on Oversight and Government Reform
Subcommittees on Information Technology and Government Operations
United States House of Representatives
December 6, 2016

Good Afternoon, Chairmen Hurd and Meadows, Ranking Members Kelly and Connolly, Members of the subcommittees, thank you for the opportunity to appear before the committee to provide an update on the Department's Federal Information Technology Acquisition Reform Act (FITARA) implementation.

As the Director of the Bureau of Budget and Planning (BP), I coordinate the resource requests the Secretary presents to OMB and to Congress each year, and oversee the allocation of funds provided by Congress. Facilitating these processes ensures that the Bureau of Information Resource Management (IRM) is provided adequate funding to address FITARA requirements.

As reported on the IT Dashboard, the Department's FY 2017 IT budget request totaled $1.8 billion. The centerpiece of our investments is the IT Central Fund, which provides nearly $300 million for development of enterprise-level systems infrastructure. The remaining $1.5 billion resides in other Department accounts to support enterprise-level and bureau IT operations and investments across the Department. BP and IRM continuously look for ways to improve coordination across the entire span of the Department's IT portfolio. The Department is committed to transparency and accountability in the management of all aspects of its IT budget. Close partnership between the CIO and IT project and program managers in all bureaus across the Department has greatly enhanced this effort.

Progress Since December 2015
I echo my colleague, Chief Information Officer Wiggins' sentiments on how FITARA implementation has improved IT management at the Department of State. I should emphasize that FITARA did not truly impose brand new budget processes on the Department. Rather, it codified existing IT management processes, and reinforced ongoing coordination efforts. For example, in formulating the FY 2017 budget request for the Electronic Health Records project, BP leveraged project

54

performance and schedule information from the CIO's office to determine the appropriate funding source and dollar amount needed to support this project. This ongoing collaboration enables us to make better informed resource decisions, manage IT investment risk, and most importantly, deliver IT services and capabilities that support the Department's mission.

Including FITARA requirements in the fiscal guidance BP provides to all the bureaus of the Department regarding formulating their budget requests has led to the inclusion of more comprehensive documentation to support IT funding requests from the bureaus. This includes analysis of cost-effectiveness and long-range planning. BP works closely with the CIO's team to review IT funding allocations, especially with regard to major IT investments. The goal is to reduce duplication of efforts in the bureaus, share technology across the Department, and deliver the best value for the taxpayer dollar.

In support of this effort, BP is refining how we monitor IT spending today. BP is implementing a slightly modified commercial off the shelf product, referred to as Budget System Modernization (BSM) to track our IT assets and cost in the Financial Plan, Formulation, and Performance Metrics phases of the project lifecycles. Implementing BSM will improve the integration of IT portfolio management data and budget data, and promote an enterprise approach to information sharing, which will foster more informed management decision-making.

Closing
With Congress' continued support, and robust collaboration with our Federal and non-federal stakeholders, we are on path toward improved FITARA implementation. We look forward to working with Congress, to ensure our efforts not only meet FITARA requirements but also reflect our collective desire to transform how State does its work.

Thank you for your time. I am happy to take any questions you may have.

Mr. WALBERG. I thank each of the witnesses for your testimony.

And now it gives me great pleasure to recognize the chairman of the subcommittee, Mr. Hurd, for your opening statement.

Mr. HURD. Thank you, Mr. Walberg, and good afternoon everyone. The technological change we are going to see in the next 20 years is going to make the last 20 years look insignificant. We are at a pivotal point in the development and utilization of emerging technologies.

And the current state of IT at most Federal agencies is, in most cases, decades behind the private sector. I want to be clear: we have made progress. Some have complained that we are not reflecting that in the scores, but we recognize there is progress being made, but we have a long way to go to get where we should be.

The new administration must prioritize IT management and cybersecurity. As seen in the OPM breach, the consequences to allowing our government to remain in the horse-and-buggy days of technology implementation can be disastrous. This is not a partisan issue. This is a security issue. We must come together, not as Republicans or as Democrats, but as Americans to solve this pressing challenge.

As I said in May when the committee released the Scorecard 2.0, the intent of grading agencies is not to shame agencies but to provide an objective measurement of progress and challenges so that we can facilitate the continued implementation of FITARA. The grades improve overall from the first scorecard to the second, and I'm pleased to see continued improvement in the grades from the second scorecard to the one released today.

The committee has made two key adjustments to the scorecard. First, as I highlighted in the hearing in May, when CIOs are reporting—who CIOs are reporting to is important. This committee intends to ensure the men and women in these CIO positions are qualified, accountable, and empowered to make decisions and lead within their agencies.

Consequently, the FITARA Scorecard 3.0 final grades include a plus if the CIO reports directly to the Secretary or Deputy Secretary of the agency and a minus if the CIO does not report to one of those two officials. Neither of the CIOs on today's panel report directly to the Secretary or Deputy Secretary, and I look forward to discussing the implications of the reporting structures at their respective agencies.

Second, the portfolio review metric has been adjusted. For a Scorecard 3.0, each agency's total portfolio stat savings was divided by its total IT budget for the most recent fiscal year—most recent 3 fiscal years, and then, as with the risk assessment transparency grades, the resulting ratio was ranked in the five agencies with the highest savings ratio received an A, the next B, et cetera.

This tiered system is more accurate than the system used in the first two scorecards, which benchmarked all agencies to one outlier agency. Moving forward, the committee will continue to evolve and adjust the scorecard as appropriate and, in doing so, will help ensure successful implementation of FITARA.

I urge all agency CIOs to reach out to the committee staff if you have questions or concerns about the scorecard generally or about

any aspect of their agency's grade, because remember, this is all information you all have reported to us.

I thank the witnesses for being here today and for their service to the Nation, and I look forward to the questions.

Thank you, Mr. Vice Chair, and I'll turn it over to you.

Mr. WALBERG. Thank you, Mr. Chairman, and at your good graces, I will now recognize myself for my 5 minutes of questioning.

I would add, as what was just stated, that these hearings are meant to be a partnership and support and encouragement, and I think seeing some of the grades of those that have been before us, we've seen some of that take place, and we want to continue that.

And so I have an opportunity here today, as I begin my questioning, talking concerning specifically to each of the agencies, and I'll let you decide which or both that would want to answer the questions. But I want to look at both DHS on data centers received a grade of A, and State received an F. So we have a complete spectrum there. So be interested to hear your answers.

First of all, going to DHS, how many data centers does DHS currently have?

Mr. MCCORMACK. DHS, we have approximately 102.

Mr. WALBERG. 102 data centers.

State, how many centers do you have?

Mr. WIGGINS. We have 366 nontiered and 19 tiered, so about 380-some-odd.

Mr. WALBERG. How many centers, DHS, did you close in the last few years, and I guess respond beyond that, how many more can we expect you to close by fiscal year 2019?

Mr. MCCORMACK. And I apologize. I should have said we had 102. We have consolidated 40 of 102. I hesitate only because we are, as I had said in my opening testimony, that we are in the middle of shifting our model to not only consolidate into our internal data centers, of which we have two core data centers, but really shifting that consolidation to the public cloud. And while we expect that to take a little bit of time, we have done some—had some success with that already at great savings. We expect that to ramp up very quickly.

So I would expect us, in 2019, if I had to have sort of rough estimate, that we would have probably less than 25, maybe less than a dozen at that point, and what I can't tell you right now is how many of those are going to end up in our internal consolidated core data centers versus out into the cloud.

Mr. WALBERG. Okay.

Mr. MCCORMACK. We are still doing that analysis right now.

Mr. WALBERG. Okay. But significant movement.

I turn to State, again, how many has State closed in the last few years and how many more can we reasonably except to see close because you have a significant number of centers?

Mr. WIGGINS. Thank you for that question. Part of 2012, we actually closed one. Since 2012, we closed six. We are targeting an additional four, one tiered and three nontiered, in coming before 2018. I think this also brings up an interesting point and one we need to work with OMB and GAO on very closely because the definition of a "data center" or as is currently presented loops in a lot of our overseas posts, and it's a challenge for us to look at closing

what are considered data centers at our posts due to our infrastructure. I think the definition of the "data center" needs to be reviewed, perhaps, in conjunction with OMB and GAO, because, frankly, what most people consider data center is not what we have at our embassies overseas. Some of them are actually communications closets with a single rack of equipment, but because they have got a UPS in that rack and there's a generator in the courtyard for that embassy, it falls in the definition of a "data center," as narrowly defined. So we need to work on that.

The target that has been given to us is about 220 data centers to be closed in the next year and a half, which is going to be an extreme stretch for us. To Congressman Connolly's point, if you don't mind, I'll just address this as well. You asked about data center savings. I'm not sure whether to quote Pogo or Shakespeare, whether the fault is in ourselves or our stars; or whether we have met the enemy, and it is us.

Mr. WALBERG. Maybe both will work.

Mr. WIGGINS. Yeah, exactly. We actually had about $35 million in data center closure cost savings, but our scorecard shows zero, so that's on us. We have failed to report that properly through the database and through the scorecard, so we are getting credit for zero, and we should have about 35 million.

OMB had put us down for a target of 17.1, so we have exceeded that by two times what the target was, but we have not properly reported it. So when you talk about FITARA refinements, some of it calls upon the individual agencies as they report them.

So I do look forward to having continued conversation with OMB and GAO in exactly how we define a data center, because, again, I think the other thing the State perhaps doesn't get a credit for is we provide a shared service for a lot of agencies overseas. There are a number agencies that actually ride our infrastructure, and we provide them service. They have collapsed their data centers because we provide that over to them. So we need to continue to refine and review that.

Mr. CONNOLLY. Mr. Chairman, would you yield just for a second?

Mr. WALBERG. Yeah, while I'm chairman, I can yield for just a second.

Mr. CONNOLLY. Just to your point, I would hope that a refined scorecard would reflect the data not reported but recorded here, because the exercise again is to mark progress, not to dig into you because you were late or something like that. So I would hope we can incorporate that so the State Department is credited for the progress it achieved.

Thank you, Mr. Chairman.

Mr. WALBERG. I don't want to miss this point, so I want to go to Mr. Powner. Could you comment on definition of "data center" that was brought up by Mr. Wiggins?

Mr. POWNER. Yeah, this gets back to, you know, we have had many definitions of "data centers." We started off with one. When Steve Van Roekel was the CIO, he changed the definition to include all these small closets. Now we are at a tiered, nontiered. I think what's really important going forward is we have these data center consolidation plans required in FITARA, and I know DHS—

Mr. McCormack, I know you are working on yours, getting it in by the end of December—we are tracking those.

I think what's really important is that these issues and those plans which go to OMB get resolved through OMB. We can be part of those discussions to make sure that we're focused on the right things, and if there are some closets and the whole bit, we can acknowledge that moving forward. That's fair. That's fair.

I think what's really important with the hearing here, Ranking Member Connolly, to your point, is some of this reporting that was one time to the Appropriation Committees is now it's OMB, and not all the agencies were taking this serious enough, and we just need to be consistent and serious so that we get the right savings so that we can modernize more.

We need to root out these inefficiencies because there's a lot of modernization that everyone has, and hopefully, we can reinvest and do the right thing.

Mr. WALBERG. Thank you. And my time is expired, and now I have the privilege to recognize the ranking member as well as the gentlelady who has the privilege of representing my hometown, Ms. Kelly.

Mr. KELLY. Thank you. One of the things we've learned is the importance of grading whether or not an agency CIO reports directly to the Secretary or the Deputy Secretary of the agency. Mr. Powner, in your assessment, why is it important to the success of an agency's overall FITARA implementation plan that there be a direct reporting relationship between the CIO and the head of an agency?

Mr. POWNER. So I think the higher up you report, the better. Typically, that's associated with more authorities. Now, can it work if you don't? Absolutely it can, but we've seen plenty of situations in DHS—not going to revisit history here—where that reporting arrangement wasn't great for the CIO and the CIO wasn't really backed—not with the current folks.

But I think what's important is if you look at the FITARA implementation plans that get reports, self-assessments by the agencies, the self-assessments are higher for those CIOs that report to the DepSec or higher. So CIOs are telling us that their authorities are stronger the higher they report.

Mr. KELLY. And how did you go about evaluating whether each of the agencies that were scored had a direct reporting relationship between their CIO and Secretary or Deputy Secretary?

Mr. POWNER. We have ongoing work for this committee that we're looking at CIO authorities, which include the reporting structures, and honestly, a lot of this comes right off of the agencies' and departments' Web sites, but we confirmed a lot of that through our ongoing work that we're performing for this committee.

Mr. KELLY. Thank you. In my opening I talked about there were agencies that improved their letter grade. For example, the current scorecard shows significant improvement from NASA that went from an F to a C-plus. Since GAO first began working with our subcommittee on a scorecard for monitoring agency progress in FITARA, have you seen a steady improvement in the overall grades?

Mr. POWNER. I think there's some agencies that have had excellent improvement. NASA, that was highlighted, not only did Renee Wynn make remarkable improvements in the data center area, on software licensing, she's also reporting tens of millions of dollars in software licensing savings.

So I think having NASA up here at your last hearing resulted in great improvements. Clearly, there are some agencies that are in that D range that we need to get more progress on. And to comment on the F, you know, Richard McKinney at DOT is one of the best CIOs we have, but he has a situation there at the Department of Transportation that's very difficult that he inherited, but it's not from his efforts. And even though he has an F, he deserves a lot of credit for what he's done. I know he's been in front of this committee.

Mr. KELLY. And out of the four areas, which area has been one that you've seen more improvement than others?

Mr. POWNER. I think clearly data center consolidation has been on a nice track with reported savings, and then clearly, too, I think the adjustment that Chairman Hurd mentioned on the portfolios that were—tiered it—that was an appropriate adjustment. It was more fair to the agencies, and I think that's part of the reason why you see an increase in a lot of the grades too is because of the portfolio stat grades creeped up.

Mr. KELLY. Thank you.

Mr. McCormack, DHS was among the agencies whose overall score improved, going from C to B-minus. Can you briefly explain what were the steps DHS has taken to improve its success?

Mr. MCCORMACK. It was in a portfolio review. We went up significantly there. We spent a lot of attention on that, worked very closely with GAO to make sure that we were doing that correctly and thoroughly, and I think that's where we made most of our strides in this particular round.

Mr. KELLY. And while we've seen agencies that have improved, we have seen agencies that haven't or have stayed the same.

Mr. Wiggins, can you explain what challenges the State Department has been facing when it comes to FITARA implementation that would account for its overall score remaining so low?

Mr. WIGGINS. Yes. Thank you for the question. I think, as I outlined earlier, I think part of the challenge is, when we don't do our own reporting properly, then we get a failing grade in certain areas. But in other areas, there has been a tendency on our part to perhaps get into analysis paralysis. For example, when it comes to enterprise license agreement, we have about $47 million in software savings we've already realized, and there's another 43 that we're expecting to realize, but we did not report it because we could not confirm it 100 percent, so that's something we have to improve.

The other thing is when you look at incremental development, for example, we did not have a mandatory use of incremental development as part of our project management plan. Since I have come into this office 5 months ago, I have made that mandatory.

In addition, we did not have an office that focused on workforce. We did have an IT strategic plan. We did not have a cybersecurity strategy. We did not have a cybersecurity tracker. All those things have been put in place since I've assumed the role. So we have a

lot of work to do to catch up. I have set a stretch goal for my staff to get us to a B this year, and I'll say on the record that I will accept a C, but I would like to get us to a B. And I think we have a number of processes in place to get us there. We just have to knuckle down and do it.

We have an excellent partnership with our colleagues in the old office of bureau—excuse me, Bureau of Budget and Planning, as well as our other peers, like the chief of human resources officer. We have to leverage those and kind of land the planes. We've got a lot of very good planes in place. As Mr. Powner mentioned, we've already undertaken our workforce review. Our report was given to us in November. We are now going through that. So there are a lot of things that have taken place in the last few months. We just have to get those things and drill into them.

Mr. KELLY. And in what ways can Congress help you with the implementation?

Mr. WIGGINS. Time. You know, the one thing that no one has enough of. I think, in relation to your question earlier, Congresswoman Kelly, I—again, this is coming from the new kid on the block who got a D-minus, so, of course, this is going to be a self-serving comment, but when you look at the CIO authorities, I think, if I could offer a chance of refinement, I think it's not so much what box reports to what box but what you actually do with that opportunity.

So, for example, I don't report directly to the Deputy Secretary or the Secretary of State, but I meet with the Secretary four times a week, I meet with the Deputy Secretary eight times a months. I have a direct tasking from her on cybersecurity. I have a direct tasking from her on knowledge management. An outcome from that was our overall cybersecurity strategy, which we never had before, and the creation of a risk officer for the first time ever in the Department.

So I would almost say quality of engagement, and even quantity is one measure, obviously, but quantity and quality of engagement is a little bit more nuanced than just a plus or a minus. And, again, this is coming from a guy who got a minus, so take that with a grain of salt.

Mr. KELLY. Thank you, and I yield back.

Mr. HURD. [Presiding.] I'd now like to recognize the distinguished gentleman from the great State of Texas, Mr. Farenthold, for your questions.

Mr. FARENTHOLD. Thank you, Mr. Chairman.

And I have some questions, but I want to start off with Mr. Powner.

You mentioned in your testimony that there were billions of dollars in low-hanging fruit of technology fixes we could do. I don't want to let that remark just slide by. You want to share a couple of pieces of low-hanging fruit? Anything we can do to help the budget is a win.

Mr. POWNER. I think the number one area for cost savings—and it always has been the number one area—is data center consolidation. We have $5 billion on the table, and honestly, if you look at the optimization metrics at some of these agencies, I think that $5 billion could be higher. That's the biggest bucket. When you look

at your scorecard here, we need to keep the pressure on savings. The metrics are fine. We can weave that in down the road, but there's a lot of money to be saved

Mr. FARENTHOLD. Anything else?

Mr. POWNER. That's number one. Portfolio stats, some duplicative spending, I could sit here and tell you stories of agencies that still have component bureaus that refuse to go to emails of service, even though it's can cheaper than their current email. There's some low-hanging fruit there that we could still fix with duplicative wasteful spending at agencies, in the portfolio stat area.

Mr. FARENTHOLD. All right. So, while your microphone is on, and I'm going to address this to anybody else who wants to answer it as well. What are we not measuring in FITARA that we need to be measuring?

Mr. POWNER. I think the people measurement is very, very important. Clearly, these are four areas in the law—these are four areas to save money, incremental development. No one is going to argue that going small isn't the right thing, so you need to continue to measure these areas. But if you look at the people part of it, the CIO authorities, to be given the right authorities with support from the top, that continues—should be the focus of this committee. But, also, if you have support from the top and a strong CIO but you have a workforce that has a lot of holes in it, you're going to have a tough time.

So I think that people part at the top—and we just issued a report that showed these gap assessments on IT skills, which includes the cyber workforce. Agencies have big gaps that we need to address more comprehensively.

Mr. FARENTHOLD. I'll get to people in a second. Does anybody else want to add a missing?

Okay. So let's go into people. You talked specifically within the cyber. I want to talk with the workforce in general. You can get the best technology in the world, but when you have somebody who's used to doing things on a Windows XP or a, you know, out-of-date BlackBerry or whatever, how are we addressing the people issues and training? Do we have an adequate way to look at that, and is that something we need to be focusing more on?

I'll start with Mr. Wiggins. You're smiling over there, and I know we've had some unrelated testimony in this committee on something completely different about State Department technology.

Mr. WIGGINS. Thank you for the question. I am chafing at the bit. As a former dean of our School of Applied Information Technology at FSI and a former instructor, I'm a big believer in the power of people. And if you allow me to wax philosophically, I'm a guy who started as a GS–7 who worked my way up to where I am. I paid my dues up full on the way, and the only way I got there is to be a lifelong learner. Our gap analysis is demonstrating that we—the Department of State has significant needs in the areas of skills, specifically with cyber, and since plagiarism is the sincerest form of flattery, we're going after DHS' model of enhanced skills incentive pay.

Skills incentive pay actually started with the Department of State when I was the dean, and now DHS has expanded on that

for cyber skills incentive pay to try andcapture and retain the best talent out there, and we want do the same thing.

The other thing I think is important, it's not just the technologists who are behind the equipment; it's the users. It's the customers, and I always tell my folks we're a customer-service organization. If we're not giving training to our customers, we might as well be handing them bricks. And this also gets in the cyber realm because, as I think everybody knows, our biggest threat is—well, there is an insider threat to a certain degree, obviously, but it's when our customers click on that spear phishing link or click on the ransomware that we've experience our greatest problems, and so it's that education of the total workforce, not just the IT workforce, that's very important.

In fact, we are getting ready to deploy this month—I won't give the technology, because I don't it leveraged against us, but an artificial intelligence learning tool to combat spear phishing in particular, because we've been vulnerable to both spear phishing and ransomware. So I take it to heart that the technology training, both for the workforce and for the IT workforce, larger workforce, is vital to us.

Mr. FARENTHOLD. One more question as I'm running out of time. Mr. Wiggins, I'll hit you with it, too. The State Department is the only one that basically dropped in grade with your minus. Is there anything unique about the State Department that makes your challenges different from another agency?

Mr. WIGGINS. Thank you for the question. I would say, as I alluded to earlier, it's kind of our overseas posture and the necessity of providing a shared service to all those missions I discussed. It's also the fact that we had a complete turnover in our senior management. It's not just me. It's every other deputy chief information officer has been changed out in the last 4 months with one exception. So we've got an entirely new group that's looking at this. And so we're taking—it's an opportunity to take a fresh look at everything, but it's also a challenge to get us geared up and going forward, so that's when——

Mr. FARENTHOLD. Your staff are professional employees. They're not political.

Mr. WIGGINS. That's correct. And every one of my members, including myself, we're professional members. We worked our way up through the ranks.

Mr. FARENTHOLD. Thank you, Mr. Chairman. I see my time is expired.

Mr. HURD. I'd like to now recognize my friend from the Commonwealth of Virginia and the original cosponsor of the Connolly-Issa bill, also known as FITARA, Mr. Connolly, for his 5 minutes of questioning.

Mr. CONNOLLY. Thank you, Mr. Chairman. Thank for your generosity there.

Just a parenthetical note, Mr. Wiggins, Mr. Pitkin, compliance with FITARA and reporting under FITARA is not a voluntary activity. I was on the floor yesterday passing a truncated State Department authorization bill. Included in that bill is my amendment requiring the State Department to comply fully with the terms of FITARA.

So we are not going away, and we'll use—I happen to be on that committee too. So one way or another, the State Department is going to have to come to grips with reality here. Every agency can claim, to Mr. Farenthold's question—I think it was Mr. Farenthold—every agency is unique. Every agency has unique missions, and you're no different than anybody else in that regard.

Technology—the management of IT is potentially—and, Mr. Wiggins, your testimony was welcomed, a welcome addition from State Department—a transformative force for changing how we do business, how we can improve efficiency and performance and productivity, and do a better job of providing service to our clients and our customers, as Mr. Wiggins indicates.

So it needs to be looked at in that way. I am concerned, Mr. Wiggins, that your testimony about who you report to, because, as Mr. Powner, we know this from our own experience, and you mentioned DOT: It's got to come from the top. It's got to have—that person, whoever is the Secretary of the agency, has got to understand the transformative nature of IT, and oh, by the way, the other side: What could go wrong if this goes bad?

And I don't know how often we have to learn that in the form of Web site collapses or cyber attacks that are successful. But, you know, this is not something tangential to the mission. It's actually integral to the mission. And I can see you want to comment, Mr. Wiggins. I welcome your comment.

Mr. WIGGINS. Thank you, Congressman Connolly, and can you hear me? I'm sorry. First off, I wholeheartedly agree with your evaluation of the transformative nature of IT. I like to say that IT is a tool. It's a very powerful and expensive tool, but that's just it; it's a tool. And that gets back to the whole education piece of, if we're going to put those tools out there, we have to make sure that people have the background to leverage them.

On taking FITARA seriously and being passionate about it, I can tell you that my concerns about our FITARA implementation are such that I've identified five full-time employee positions I'm conferring over from programmatic status to support FITARA specifically so we can move forward on getting from a D to a higher grade. Because whether it's the evaluation of incremental development or any of the other budgetary pieces or programmatic pieces, we have to focus on it, and I think by putting additional FTEs against this, it will definitely help.

As far as the reporting structure, thank you for your comments. As I said, I meet on a regular basis with the Deputy Secretary. She is directly involved in a lot of the activities, and it's almost a dotted line between me and her office—excuse me—me and my office, excuse me. But the other nuance, if you will, is that working with my other Assistant Secretaries, such as Mr. Pitkin—you heard a lot about collaboration in my testimony. That's kind of how I like to operate. I like to work among peers. I don't like to work by fiat necessarily. I feel I'm very effective in working collaboratively with my peers. In having that dash line to the DepSec gives me that authority. When I walk in and say, "The DepSec has identified that we have to do this," I get a lot of responses. So your point is well-taken, though, and I will continue to review that.

In fact, there was an Office of the Inspector General report recommending it. In reviewing it, both the Deputy Secretary and Under Secretary conquered that the CIO position should remain where it is, at least for the time being.

Mr. CONNOLLY. Yeah. We want to elevate your position. We didn't—in writing the legislation, we weren't overly prescriptive. We were hoping that the situation—I mean, the hierarchy would evolve to a more rational hierarchy. We have 250 people named CIO in 24 agencies. There is no private corporation, no matter how big, that would have anything like that.

In fact, it's one of my favorite hobbies to ask a CEO of a major corporation, Fortune 500, "How many CIOs have you got," you know, and I do it with a straight face. And they always look at me quizzically, like, "Well, one." And I go: "Well, let me tell you what we've got in the Federal Government."

So we didn't do that, but we do expect that there is a primus inter pares, somebody emerges as the chief CIO, and that that person has the backing of the head of the agency, the head of the agency, not 16 rungs down or 3 rungs, and the alternative is we get prescriptive.

I mentioned in the beginning in my opening statement, the four of us are not going away. We have been shepherding this, and we are quite capable of writing bipartisan legislation. We would prefer not to do that, but we've got to have cooperation from the very top. And Mr. Powner mentioned a couple that, "Well, we don't have it," and I don't know if you want to comment on this, Mr. Powner, because my time is up, but on this whole issue of CIO authority and how well or poorly it's evolving.

Mr. POWNER. Yeah, I think clearly reporting higher helps. I think a key question we look, whether you have CIO authority of not, is, are you in a position that you could halt or terminate a troubled project? We have too many troubled projects, and we continue to throw money at bad projects. And when CIOs attempt to interject themselves, if they can interject appropriately and halt, manage risk, do the right thing, then you have authority. We don't have that across the board, and having support from the top does help you do that.

Mr. HURD. I would like to now recognize Mr. Blum for 5 minutes of questioning.

Mr. BLUM. Thank you, Chairman Hurd. From the great State of Iowa, I think you omitted that.

Welcome to the panelists today. I think it was a couple of weeks ago, in our IT Subcommittee hearing, we had the Social Security Administration sitting in your seats. In my questioning of them, we stumbled upon the fact that, in 2006, they undertook a massive IT project that lasted 7 years to around 2013, 2014. And the end result was it was scrapped.

So I asked how much was spent. The answer was $340 million was wasted on that IT project in the Social Security Administration. I posted that in social media, and I can't repeat some of the comments that I have received from the people in the First District of Iowa about wasting $340 million of the taxpayers' money.

The largest city in my district, Cedar Rapids, Iowa, they've had two 500-year floods in the last 8 years. They need $85 million for

a flood wall. We wasted four times that, four flood walls, in the So-
cial Security Administration on a scrapped IT project.

To add insult to injury, I asked, was the vendor paid, Lockheed
Martin? They were paid. I asked, was the CEO terminated? He was
reassigned, of course, of course.

So incremental software development makes a tremendous
amount of sense to me. And this question is for Mr. Powner and
Mr. McCormack and Mr. Wiggins. Is incremental software develop-
ment, A, is it working, and B, what are the challenges to imple-
menting it? Mr. Powner first.

Mr. POWNER. I think clearly when you look at the historical na-
ture of incremental development—we did a report a few years ago
on successful IT acquisitions. There were seven that agencies point-
ed to that were a success story deployed within—somewhere within
cost and schedule. Users liked this system. Every one of them was
an increment of a larger development effort.

So I think when you look at incremental development, there's no
argument that's the right way to go. Agile development incre-
mental, we need to continue to go down that path. I think we need
to look real hard about funding projects that you can't deliver
something within that budget year. OMB has a 6-month require-
ment on incremental development, but if you can't deliver some-
thing within the budget year, we ought to think real hard about
whether we ought to be throwing money at it.

Mr. BLUM. Mr. McCormack.

Mr. MCCORMACK. Thank you for the question. If I could rewind—
and indulge me for just a moment on the reporting relationship sit-
uation. I've been a CIO of an operating component. I've been a CIO
at Department of Justice and now the CIO at the Department of
Homeland Security and the vice chair of the executive council, and
I will tell you the number one thing, in my opinion, that makes
this successful is what I call goal congruence and a governance
structure at the Department.

Mr. CONNOLLY. Did you say—I'm sorry, I couldn't hear what you
just said.

Mr. MCCORMACK. Goal congruence—and I'll explain that in a
minute—and a governance structure. Every CxO in the Depart-
ment of Homeland Security has the authority to sort of throw the
flag in and say, "I've got a problem with that project," and when
I say "CxO," I'm talking about the chief procurement officer, the
chief of human capital officer, certainly myself. All of us together
as sort of a board of directors have that authority.

In regards to the agile development, and this is where the goal
congruence comes into play. It works, right. It's a private sector
best practice. If you go out and look at any advanced private sector
company that uses IT as a strategic weapon, I'll call it, they are
all developing in this kind of a process. But you cannot do that un-
less you have the right skills, which means you need your CHCOs
to help you hire those folks. You cannot do that unless you have
the right procurements in place.

Right, I talked about FLASH and ECS, which is our cloud-based
technology services and our agile software development capability.
Right, that's our chief procurement officer. If they're not completely
aligned with your movement, so to speak, none of this happens.

And so all those folks typically report into—a lot of times it's not the Deputy Secretary. It's the Under Secretary of Management, and that's what's really important.

So if you're going to sort of move the ball forward on whether it's security with FISMA, whether it's your digital transformation effort, whether it's FITARA, you need to make sure that the folks that are reporting to that individual are on board, and particularly that person is on board. I think that——

Mr. BLUM. Are there documents signed off to make sure those——

Mr. MCCORMACK. Sorry?

Mr. BLUM. Are there documents that are physically signed off on to make sure the physical parties you just mentioned are on board so that goals are congruent?

Mr. MCCORMACK. Absolutely. We have——

Mr. BLUM. In the private sector, we sign off on——

Mr. MCCORMACK. —elements in their performance plans in regards to the governance process. Every single gate review gets certified and codified in writing and cannot go through that process and has to be approved by every one of those members in our acquisition review board going forward. That's that governance structure I was talking about. Every one of the CxOs are sort of board of directors of that governance structure. It's run by, in this particular case, the Under Secretary of Management.

But I think it's—I just wanted to point that out that I think it's very important. While you can have the CIO report to the Deputy Secretary, which is important and could be powerful, if they're not associated to the individual that you're reporting to, then you're still in negotiation, right, you're constantly negotiating.

If that individual is on board and that individual says, "Hey, we're going to move," then we're going to move, right, and so that's just something that I would think this group ought to think about and consider.

Mr. BLUM. Mr. Chairman, can Mr. Wiggins answer my question?

Mr. HURD. [Nonverbal response.]

Mr. BLUM. Thank you. Mr. Wiggins.

Mr. WIGGINS. Thank you for the time to answer. I just want to echo both Mr. McCormack's comments and also Mr. Powner's in getting to an earlier point. As the only CIO at the Department of State, I have the ability, as the authorizing official, to approve IT projects and kill IT projects. We have a governance structure in place that's pretty comprehensive. We have an E–Gov Program Board that meets on a quarterly basis, and then you've got an E–Gov Advisory Board that meets on a monthly basis. We also have a new cloud computing governance board that started in May to review ongoing cloud efforts.

The governance structure is extremely important, and as I mentioned earlier, when I was responding to Congressman Connolly, excuse me, we've now added that incremental development into the baseline change request for all IT projects going forward. We also have something called Managing State Projects for IT, MSPIT, that has control gates, and there's a review process. Not only do you have to have a sponsor for your project, but it goes through a regular control gate, and agile development is a part of that.

There are two challenges I see with agile development. Number one, the user interface and the user experience has to be built into it. So we have what are called UX expertise that we've gotten from U.S. Digital Services to help in that whole usability phase of it and also for that agile loopback.

And the other thing I would say that is a challenge is that when you, in our case, we use a firm-fixed-price contract, and when you start to look at agile, oftentimes when you say to a developer, who is oftentimes a contractor, "Okay, I now want you to go in a different direction," and they say, "Fine, that's a surge, and that's going to cost you X amount of money in addition." So I think the contracting aspect of it too, when you have a number of non-FTE who are doing contracting development—or, excuse me, programming development is another key component and a challenge. But absolutely, agility, agile workforce—agile development is a key component. Thank you.

RPTR JOHNSON

EDTR CRYSTAL

[3:19 p.m.]

Mr. BLUM. I yield back the time I don't have, and thank you for your indulgence, Mr. Chairman.

Mr. HURD. I would like to thank the gentleman for his insightful questions.

Now I would like to recognize the distinguished gentleman from America's Dairyland, Mr. Grothman, for 5 minutes of questions.

Mr. GROTHMAN. Very good. I hate to pick on Mr. McCormack again, but I guess you're it. How many positions at DHS have the title of CIO?

Mr. MCCORMACK. Fifteen, including myself.

Mr. GROTHMAN. Okay. And what is your relationship between you and the others, daily or weekly or monthly or whatever?

Mr. MCCORMACK. Depending on the CIO, it could be daily. It's certainly weekly and monthly. We have regularly scheduled CIO Council meetings. I have a dotted-line reporting relationship. They all do. I have input into their performance plans and I have the ultimate selection authority of all CIOs.

Mr. GROTHMAN. So you supervise the other 14.

Mr. MCCORMACK. Sure.

Mr. GROTHMAN. And every part of DHS has a CIO assigned to it?

Mr. MCCORMACK. They do.

Mr. GROTHMAN. Okay. Do you provide input on their performance reviews?

Mr. MCCORMACK. I do.

Mr. GROTHMAN. Okay. Is there a lot of turnover in these jobs? First of all, I should ask, how long have you had your current position?

Mr. MCCORMACK. This will be my third year.

Mr. GROTHMAN. Okay. And you came, what was your position before this?

Mr. MCCORMACK. I was the CIO at the Department of Justice.

Mr. GROTHMAN. Okay. A lot of turnover in these positions or no?

Mr. MCCORMACK. I'm sorry?

Mr. GROTHMAN. Is there a lot of turnover in these positions?

Mr. MCCORMACK. I would say the average tenure is probably 3-plus years. There are some that have been there more than that, maybe as long as 5. But it's fairly stable. That's one of the things I spend a lot of time on, is making sure that we have a good what I call leadership pipeline, including the deputy CIOs, which I pay attention to quite a bit as well.

I am happy to say that we have very little vacancies right now across our community. And we spend a lot of time paying attention to that because that's just, I think, one of the leadership responsibilities that we have, is to make sure that we're filling that pipeline, paying attention to it, and developing the future leaders.

Mr. GROTHMAN. Okay. About what percentage of your budget is spent on the cloud? Kind of switching gears.

Mr. MCCORMACK. On the cloud it's about 4 percent right now.

Mr. GROTHMAN. Okay. Has that increased over time?

Mr. MCCORMACK. Yes. And that will increase significantly with the implementation—we have been doing a lot of pilots, which are really more than pilots, over the last year. I had some significant successes there. We just recently awarded this cloud contract, and we expect that to ramp up very quickly.

Mr. GROTHMAN. Do you feel overall that'll decrease the amount of money that's spent on information technology from the government?

Mr. MCCORMACK. Absolutely. Again, I hesitate only from the standpoint is there is a lot of pent-up demand for capability in the Federal Government. So right now all of us are making choices based on different types of technology and different costs associated to that.

What we have found through our cloud pilots is that we're able to deliver capability, incrementally, at a fraction of the cost and a fraction of the price.

Mr. GROTHMAN. Okay.

Mr. MCCORMACK. So it's been very interesting to see the emerging technology and our ability to adopt it quickly and deliver at a short amount of timeframe.

Mr. GROTHMAN. Do you believe that means, in the end, less personnel?

Mr. MCCORMACK. I wouldn't say less personnel. I would say different personnel, in many cases, again, simply because the demand signal is very high in regards to the capabilities that the operators need and want.

Mr. GROTHMAN. Can you give me any specific example in which as you put more and more into the cloud, any one of your subgroups or whatever, that you have seen a savings? Just an anecdotal piece of evidence that you can give this committee to say this is how we can save money?

Mr. MCCORMACK. Yeah. I mean, even with our traditional data center delivery models that we would use compared to some of the cloud-based delivery models, the cost is much less than the cloud.

I will tell you in our open market strategy we've reconstructed the contracts that we were using in our private cloud data centers, which allowed the current vendors in those data centers to sharpen their pencils because we have requirements and needs at times to use a private cloud versus a public cloud. But what we were trying

to do is get the costs to balance out. So we have been able to do that fairly aggressively by reconstructing that.

I will tell you, by the way, this is why the partnership is very important. That takes an extensive amount of work on our staff to figure out how to do that and on our procurement organization to put those contracts together. So that partnership that I was talking about earlier, to hiring those types of people that can do those types of negotiations, to work with our procurement community, to work through those capabilities, is very significant.

Mr. GROTHMAN. Okay. I see my time is up. So thank you for giving me my 5 minutes.

Mr. HURD. Thank you, sir.

I would like to recognize myself now.

Mr. Pitkin, what's the IT budget for the State Department?

Mr. PITKIN. Sir, approximately $1.9 billion.

Mr. HURD. $1.9 billion. How much of that does Mr. Wiggins have responsibility over?

Mr. PITKIN. Approximately 50 percent.

Mr. HURD. Fifty? Five-zero?

Mr. PITKIN. Five-zero.

Mr. HURD. And what's the reason for not having responsibility over the other 50 percent?

Mr. PITKIN. Another 25 percent is under the control or falls under the Bureau of Consular Affairs. It's essentially our visa and passport system. So they essentially have a very large both a legacy system as well as systems they're developing to modernize our visa passport systems. And the other 25 percent is distributed among other bureaus. About 5 percent with our comptroller for payroll and the financial system 5 percent.

Mr. HURD. So does the Consular Bureau have a CIO? Who is responsible for the implementation of their digital infrastructure?

Mr. PITKIN. They have an information office, but it falls within the overall authorities of the CIO. So they have their own personnel, their own IT infrastructure but they report——

Mr. HURD. Who has the ability to halt or terminate a troubled project within the Consular Bureau?

Mr. PITKIN. Certainly the assistant secretary for consular affairs would, as well as her management team, primarily the deputy or her——

Mr. HURD. Do you?

Mr. PITKIN. On my own authority I would not. Certainly I can control the spigot of funds, but I would not make a unilateral decision to halt funding for a project without consultation with the CIO. So with the CIO I could make that determination, but of course I would defer to Frontis' expertise and whether it was truly a troubled project.

Mr. HURD. Thanks for the perspective. That's why one of the reasons that we asked the deputies of your two agencies to sit and visit with us as well, to have this broader conversation. And in future hearings we are going to be doing that.

Mr. Wiggins, the visa and passport system, is this the same as the Consular Systems Modernization program?

Mr. WIGGINS. I believe you are referring, yes, to Consular One and the overall consular IT system, yes.

Mr. HURD. And you've assigned—you've actually assigned a medium risk rating for this IT investment. Is that right?

Mr. WIGGINS. That's correct.

Mr. HURD. And yet you have no budgetary control over this?

Mr. WIGGINS. I would say I have budgetary collaboration on it. We sit in on the Bureau of Consular Affairs budget review, along with Mr. Pitkin, and I meet on a monthly basis with the assistant secretary from Consular Affairs. Their principal deputy assistant secretary also meets with my principal deputy assistant secretary to review the investments and the overall projects within IT. And I would say that that was recently—it was at a 2 and it was upgraded to a 3.

Mr. HURD. So about $50 million has roughly been put into this project. Is that correct?

Mr. WIGGINS. That's correct.

Mr. HURD. Is there something working?

Mr. WIGGINS. Yes. I believe that they overhauled part of the combined consular database. And I know that there is a DVIS system—I can't remember exactly what the acronym stands for—but that's targeted to be replaced starting this year.

Mr. HURD. And the additional $118 million that is going to be spent this year, what is that going to get us?

Mr. WIGGINS. Honestly, I do not know. I'd have to take that back and get back to you.

Mr. HURD. Good copy. Please do. I'd be interested in having an insight on that.

Are you responsible for all the licensing?

Mr. WIGGINS. Enterprise license agreements? Yes, sir, I am.

Mr. HURD. You have software and operating systems that stopped being supported back in 2010, and these are fairly well known operating systems. Is it not included in your budget or in the contract with those entities to upgrade those systems?

Mr. WIGGINS. Yes. In fact we have a Global IT Modernization office, which is referred to as GITM, that is responsible for the overall upgrade of our systems. We are in the process of upgrading our systems worldwide right now to BladeSystems. It's called an enterprise converged platform. We are averaging about five offices a month and five posts a month. We hope to get to 10 a month.

On the enterprise license agreement, we currently have five ELAs or BPAs. They are with Microsoft, Oracle, VMware, Citrix, and Adobe. We have realized about $47 million in savings so far in the ELA for that and we anticipate another $43 million. And in addition we do partner with the other bureaus through our capital investment process to look at——

Mr. HURD. So is the plan to upgrade all the systems, all the operating systems?

Mr. WIGGINS. Absolutely.

Mr. HURD. And when is that going to happen?

Mr. WIGGINS. I'd have to do my math very quickly, but if not this fiscal year, by the next fiscal year.

Mr. HURD. And that includes the Bureau of Consular Affairs?

Mr. WIGGINS. That's correct.

Mr. HURD. Gotcha.

Mr. Fulghum, what is the IT budget for the DHS?

Mr. FULGHUM. Six billion.

Mr. HURD. And how much does Mr. McCormack have?

Mr. FULGHUM. He has oversight of all 6 billion during the programming phase. You know, we execute budgets decentralized, but he has gates throughout that process where he can exercise oversight.

Mr. HURD. Does he have the ability to terminate or halt a troubled project?

Mr. FULGHUM. So the chief acquisition officer in the Department is the one who will halt a program. No program, however, will move forward without his concurrence. So in essence he does have veto power.

Mr. HURD. Mr. McCormack, how often do you meet with the Secretary or the deputy secretary?

Mr. MCCORMACK. It depends on the subject. I would say, you know, maybe once a month. A lot of times that's on cybersecurity-related issues.

Mr. HURD. How do I put this question? I don't want to get anybody in trouble. That seems a little low. How about I just make a statement. That seems a bit low.

And, ultimately, I do believe one of the most important things that FITARA is giving us is to strengthen the CIO's authorities. And the goal of our two committees is to make sure you have all the tools you need so that we can ultimately hold you and your other 14 CIOs in your Department accountable.

And that is why we stress this reporting, something as simple as how many times do you report and who do you talk to, because it's not an industry standard to have the CIO and the CISO not report directly to someone within the C suites.

I am going to yield to Mr. Blum for a question.

Mr. BLUM. Thank you, Chairman Hurd.

I just have one quick question. According to our report here it says the following: "FITARA requires OMB and agency CIOs to annually review the IT investments of an agency to, among other things, identify potential duplication and waste and identify cost savings."

So I will start with our two CIOs here, Mr. McCormack and Mr. Wiggins. My questions are, first of all, have you done exactly that every year? Secondly, is it in a report that I can read? And thirdly, are the recommendations, assuming you did it, being acted upon?

Mr. Wiggins, start with you.

Mr. WIGGINS. Thank you for the question.

In the 5 months I have been in office, no, I have not. But I will go back and check. I do know that since I became an acting CIO I have been meeting on a regular basis with Tony Scott. We have a regular meeting, the CIO Council, talking about FITARA and implementation. I do not know factually if that report has been reviewed by OMB. I will take that back and review it.

Mr. BLUM. But you are aware of the requirement

Mr. WIGGINS. Oh, absolutely, yes.

Mr. BLUM. Duplication, waste, cost savings, very, very important.

Mr. WIGGINS. I agree. I know that. I have been doing that internally through our CCGB process and our various governance proc-

esses. I am assuming that we are reporting that to OMB, but I have to make sure that we actually have done so.

Mr. BLUM. Mr. McCormack?

Mr. MCCORMACK. Yes, we have done that analysis. We have pulled that information together, done that analysis, and we do report on that.

Mr. BLUM. Are there savings? Are there duplication? Is there waste? Is it substantial?

Mr. MCCORMACK. I am sorry?

Mr. BLUM. That number, what you have come up with in that report, is it a substantial dollar amount of duplication, waste, and cost savings?

Mr. MCCORMACK. It was substantial. It's less substantial now because we have done a lot of work to wring those cost savings out, right? So we talked about the 40 data centers that we have consolidated. And that's where a lot of our cost savings came from. While we have, you know, there are 60 to go, we are not going to get the same kind of savings opportunities there simply because there is just not that much—as much savings in there because of the nature of the types of data centers.

We've put together over a dozen enterprise license agreements based on this analysis that we had done with the duplication and the opportunities there. We have wrung out significant savings in those areas as well. And so while we continue to do this analysis and go after these opportunities, obviously over time they become less and less because the low-hanging fruit has been pursued.

Mr. BLUM. Let me ask you a follow-up question to your answer. What incentives are there for Federal employees to seek out, to find duplication, waste, cost savings? What incentives are there? Are there any financial incentives? In the private sector, where I come from, there is financial incentives typically. Are there any in the Federal Government? Are there any in the IT area in DHS?

Mr. MCCORMACK. I would like to hope I am speaking on behalf of every public servant that everyone wants to do the right thing. I would say what would incentivize a component CIO, particularly in the Department of Homeland Security and I think other areas as well, we did this at DOJ, is what I call the cut, cost, and reinvest, where if you give them the opportunity to cut those costs and then reinvest it into these areas that they need funding in versus just sweep it up and go buy Coast Guard cutters or helicopters or whatever it is the agency needs—and of course we make those decisions based on risk and other things—but if there is an opportunity for them to use those savings then there is always more incentive to pursue it. And so that has worked really well for us.

Mr. BLUM. But there is no personal financial incentive.

Mr. MCCORMACK. There is no personal financial incentive for it other than internal goodness to stretch the taxpayer's dollar.

Mr. BLUM. Would an idea to have personal financial incentives, would that have some merit, do you think? Is there a place for that in government?

Mr. MCCORMACK. I would say personally no. That's not why civil servants become Federal employees, right? I would say no.

Mr. BLUM. What would you say to that, Mr. Wiggins? The same question.

Mr. WIGGINS. Yeah, first of all, it has been confirmed by somebody smarter than me that we do report our cost savings to OMB, and it is on the IT Dashboard. So I can confirm that we have done that.

I would say we have taken a look at it from a slightly different perspective. We have an award for IT innovation, it stands for Sean Smith award. So we promote innovation, and there is a cash incentive and an award for that.

In addition, we have something called the Thomas Morrison award, which is for the IT manager of the year, and there is a cash incentive for that, and that includes both innovation and improvement in processes.

So we have a couple of ways of getting at it through innovation. It is not necessarily a cost saving metric, but oftentimes when we put innovation into place there is a cost savings realized through that.

Mr. BLUM. Just for the record, I come from the private sector. I think personal financial incentives for employees are good things, and I think we could use more of it in government.

Do you have a comment on that, Mr. Powner, before I yield back, at all? I notice you are kind of smiling.

Mr. POWNER. I think right now in the government it's not set up that way.

I do think Mr. McCormack's point on the reinvest is very important. If I'm at DHS, I want to reinvest money to better secure the homeland. There's a lot of things we can't get to that we need to get to and do a much better job to protect this country. And that would be the incentive, to save money on inefficiencies and do a better job on the mission side.

Mr. BLUM. Thank you.

Thank you, Chairman Hurd. And I yield back.

Mr. HURD. And, gentlemen, we hear you loud and clear. We are trying to give you an additional tool to be able to use that savings you realize. Unfortunately, it's likely to have to wait until 2017 to pull that trigger.

I would now like to recognize Mr. Connolly again, round two.

Mr. CONNOLLY. Thank you, Mr. Chairman.

And I would say to my friend from Iowa, we are not entirely lacking in incentives. Now, Mr. Hurd and I and Ms. Kelly and others are actually—that's what the MGT Act does writ large in rewarding agencies by reinvesting the savings. And our silly system here with CBO is precluding us from doing it, frankly, by double counting money. It's a very strange, Druidic methodology, passive understanding. But at any rate we can talk about that later.

But there are also some personal incentives. There are rewards. Every agency has its own reward program. There are bonuses, performance bonuses in Federal service, which they are not as generous as the private sector. I was in the private sector too for 20 years. But it's not nonexistent. And maybe we should take a fresh look at this in terms of incentivizing Federal employees a little bit more generously. God knows we haven't been very generous to Federal employees in the last number of years. But I think it's an idea worthy of merit, and I thank my colleague from Iowa for bringing it up.

This subject of risk, I think one of the things, Mr. Powner, we have discovered is it's really hard to get people to identify high risk. One of the great achievements, contributions GAO made was by putting IT projects on the high risk list on your own really, which got the attention up here and I think in some Federal agencies. But you looked at 95 specific IT projects. In your conclusion, 60 of the 95 were kind of low balled. They were actually riskier than identified. Is that correct?

Mr. POWNER. That's correct.

Mr. CONNOLLY. And to what do you attribute that?

Mr. POWNER. That particular study, we looked at CIOs rated 60 investments as green, and we only agreed with 10 of those. We thought 50 of the 60 should have been yellow or red. And it was just based on the agency data.

And our point on that is you need to acknowledge risk to effectively manage it. So that's why the dashboard, it's too green right now. By nature a large of these large IT investments are risky. A lot of them are moderate risk, just what we are trying to do. Just acknowledge it so we can more effectively manage it that way.

Actually, both these agencies do a pretty decent job, both DHS and State Department, on acknowledging risk. They are some of our higher scores. And to their credit they have yellows and reds appropriately.

Mr. CONNOLLY. Correct me if I'm wrong. My memory says USAID had no high risk projects, is that correct, identified?

Mr. POWNER. That is correct.

Mr. CONNOLLY. It was all green.

Mr. POWNER. They got an F.

Mr. CONNOLLY. Everything is just fine.

Mr. POWNER. Yes.

Mr. CONNOLLY. Nothing to look at here. Keep on moving by.

Mr. POWNER. Everything is green, yes.

Mr. CONNOLLY. Yeah.

Mr. Wiggins, does that make any sense? I mean, for 10 years of my life I wrote the authorization in the Senate for USAID. I traveled all over the world looking at their projects and doing oversight. And I am deeply committed, actually, to our foreign assistance program. But to say it's low risk doesn't pass the giggle test.

What's going on, do you think, at USAID? And Iunderstand it's a sister agency and it's not entirely within your portfolio, but you are as close as we are going to get at this table to them.

Mr. WIGGINS. So as a proxy for Jay Mahanand, I would say that as an outsider that needs to be looked at. I would say if everything is green it's—historically, IT projects are very high risk. Something in the neighborhood of 80 percent of them failed. I know for a fact that we have about 77 percent of ours that are on target. That leaves the other 23-odd percent. So without throwing Jay under the bus, I would say I probably need to have a conversation with him about that.

Mr. CONNOLLY. And I would say if the motivation of some is to cover up risk, actually now that we are making this a formal metric you are putting yourself at risk if you call it green and it turns out to collapse, I thought you said it was fine. And so I think actually it's worthy of a second look by your counterparts across the

board, including at AID, to take a fresh look at this, because I think it's a tool that can help them and protect them and allow us to take some management measures to shore it up. It's not designed to sort of give you a bad grade because you're about to fail or what's wrong with you for even undertaking a high risk project. That's not the intent here. And I hope it will be seen for the management tool it was intended.

Thank you, Mr. Chairman.

Mr. HURD. Sure.

Mr. Fulghum, when you signed the DHS FITARA implementation plan, was that as your role as CFO or acting CFO or your role as the acting deputy under secretary?

Mr. FULGHUM. As the CFO.

Mr. HURD. As the CFO? And how much conversation did you have with the Secretary and the deputy secretary on the implementation of FITARA?

Mr. FULGHUM. As it relates to FITARA?

Mr. HURD. Uh-huh. The FITARA implementation plan specifically.

Mr. FULGHUM. I would say not routinely.

Mr. HURD. Thank you.

Has Mr. McCormack ever halted or terminated a troubled project?

Mr. FULGHUM. Mr. McCormack has recommended pausing a troubled program, yes.

Mr. HURD. Was the program paused?

Mr. FULGHUM. I'm sorry?

Mr. HURD. Was the program paused?

Mr. FULGHUM. Yes.

Mr. HURD. Mr. McCormack, was there only one program that should have been paused within DHS in your 3 years? Was there only one program in your 3 years that you have been at DHS, only one software or IT program that should have been paused or halted?

Mr. MCCORMACK. No, there was more.

Mr. HURD. There was more?

Mr. MCCORMACK. There was more than one that was paused.

Mr. HURD. And so have you had difficulty in pausing or terminating a troubled program?

Mr. MCCORMACK. No, not at all.

Mr. HURD. Good copy.

Mr. MCCORMACK. Again, as I referred back to that acquisition review board, not only the CIO, quite frankly, that whole community has the ability to throw that flag in and say, "I have concerns about this," in regards to a pause. So yeah, we've paused more than one for a variety of reasons.

Mr. HURD. Some of your peers have expressed concern with the FITARA scorecard. I appreciate your all's open input not only today, but meeting with staff on this issue. I would like my last question to be any insights or suggestions that you all have on how you would like to see this FITARA scorecard implemented or things you would like to see on the FITARA scorecard?

Because the reality is I think we ought to go beyond just FITARA. We should be looking at the implementation of FISMA,

how are we implementing the Megabyte Act when it comes to software licensing. It should be a scorecard on how you do good digital system hygiene.

But I would welcome, Mr. McCormack, Mr. Wiggins, whoever would like to go first, any feedback that you all may have.

Mr. McCORMACK. So I will take a crack at that. A couple things.

One, I saw your alarm about the frequency in which I meet with the leadership, whether it's once a month or two or three times a month or a couple times a week. It varies.

I think what's more important, which is what I had pointed out earlier, and I am not quite sure, I am looking over at GAO here about how to measure it, but to me, and this is the same discussion I had at the White House the other day, that you have got to be able to measure that goal congruence issue with the other CxOs for these different activities, whether it's FISMA, whether it's the digital transformation activities, whether it's FITARA. Somehow or another, you have to measure more than what the CIO is doing.

What I had explained to the deputy under secretary, CIOs in agencies in large part are completely dependent on their chief acquisition officers. They are completely dependent.

Mr. HURD. Should they though?

Mr. McCORMACK. What's that?

Mr. HURD. Should they? Should they be responsible or should you have that authority do that? You're the one responsible for defending that system or making sure that system is working and you should be responsible——

Mr. McCORMACK. Right, but I don't hold—I don't have employees that work for me that hold a warrant, right? Unless you're going to change those laws, then I am relying, and I should be, on the chief acquisition officer, the chief human capital officer. They're the only ones that can issue an offer for employment to a Federal employee. I can't do that, right?

And so the point I'm trying to make there is that community has to be aligned on these various goals and objectives. And whoever that community reports to directly, that's what you want to be measuring, right? And in this case, that's the deputy under secretary of management. Over at DOJ, it was the equivalent of that. It's different in different agencies.

But I think it is very important to figure out how to incorporate that into the measurements. Not just the CIO, it's a village that does these things. And it's typically that CxO span that gets involved in this, particularly the CFO, the CHCO, and the chief acquisition officer.

Mr. FULGHUM. Sir, could I add to that? So I think in DHS we're uniquely positioned with the under secretary for management structure in that he gets and the other lines of business get a lot of attention and, as he likes to say, goal congruence in terms of making sure that each line of business is supporting the other.

We have a set of integrated priorities which we get together on a very routine basis and measure progress. And I believe we have got numerous examples of how that structure is working well for our Department. We have got more to do. But that structure that we have in place, I believe, is one of the reasons we have been as successful as we have been.

Mr. HURD. Mr. Wiggins?

Mr. WIGGINS. As I mentioned earlier, I think that one of the things that would be helpful is if we go from a binary on the reporting structure to a qualitative and quantitative, frequency of meetings and what actually are the outcomes from those meetings with senior leadership.

The other thing I would say from a FITARA perspective since we are up to, is it, 3.0 now, is a FITARA cookbook of best practices that have come out from the other agencies. Either OMB can publish it or GAO. I would like to steal some of Renee's work that she did to get NASA so far ahead. I do have interaction with her through the CIO Council, but not as often as I would like. If there were a step-by-step guide on some of the most successful implementations of FITARA from some of the other agencies, we could look to map that back, and in a very cost-effective way.

The other thing I would suggest, and I am probably getting into waters that are beyond my remit perhaps, but we haven't really talked today about shadow IT and some of the issues that confront agencies related to some of the rogue elements that are out there doing things and is there a pejorative or punitive element to when the CIO does become aware of shadow IT and they try to loop it in, is there some way that either people are going to be held more accountable or there is some, as you said, kind of incentivization for the CIOs who do kind of loop that in.

Right now we are going through a process of identifying all the data centers, non-enterprise data centers out there as well as well as non-enterprise dedicated Internet networks and non-enterprise applications that are out there. We are trying to get our hands around it. We are supposed to get a report the middle of next month on exactly what's happening. That's been driven by the deputy secretary in particular.

So once we get our hands around that and start marching through those, FITARA gives us authority to do a lot of things. I don't want to get into the punitive aspects of it, but that might be helpful as well.

The other thing, of course, cyber is woven into a lot of this, cybersecurity. It's not called out specifically in some of the things we are currently measuring, but it touches just about everything we are talking about, whether it's the workforce or it's the status of our systems. So having some kind of cybersecurity measure in there built into some of these metrics would be helpful.

And lastly, and again preaching to the converted, obviously, is this whole aspect of the workforce and gaining a better measure on exactly how best practices are being taken in different agencies to hire, train, retain, and recognize the best workforce out there for IT so that government can be a place that people want to come to. For example, in the Department of State right now, we are doing a public-private partnership. We are going to be sending people out to Silicon Valley. I am paying for that out of my budget, for people to go out for a 1-year sabbatical with Cisco. I am doing another one with a partner agency up in Maryland. People will go and spend 18 months to 2 years up there to bring best practices back.

So if, again, there are best practices or a workforce advisory piece that could be enhanced through FITARA that would give us

a little more leverage and more ideas, I think that would be tremendously helpful. I think there are some provisions there already, and we just need to flesh them out and continue to refine them.

Mr. HURD. Mr. Wiggins, if you find shadow IT, I think you're going to be patted on the back, because in 4 months it's very hard to say that that shadow IT existed during your tenure.

Mr. WIGGINS. If I can offer for the record as well, our partnership with our chief acquisition officer has brought to light in just in the last few months a $500,000 shadow IT effort that we've currently blocked. So with our partnerships through the budget and planning office and also our chief acquisition officer we are finding these things. But like so many things, when you kick over a rock you have to be careful what you find.

Mr. HURD. I would like to yield to the gentleman from Virginia.

Mr. CONNOLLY. I was just going to actually say to you, Mr. Chairman, I agree with you that at some point we probably want to broaden the scorecard. But I do think while we are still in the embryonic stage of implementation of FITARA, we want to get the fundamentals right. You look at data center consolidation, and there is nothing about those metrics that would allow us to conclude, well, we are pretty much over that one. In fact, until very recently, we kept on discovering more of them. We weren't shrinking them, we were actually getting apparently more accurate in identifying them. And I think we went by a factor of six or seven over the original estimate by Vivek Kundra in the first year of this administration.

So, I mean, I would just hope we keep in mind what you said, but that we also for now try to deal with the basics so that we get the fundamentals in place that allow us to better grapple with cyber threats and the like.

So thank you, Mr. Chairman.

Mr. HURD. Crawl, walk, run.

And I know I said that was my last question, but this just came to my mind. Mr. Wiggins and Mr. McCormack, you are the two individuals within your agencies that can provide an ATO, an authorization to operate. Is that correct?

Mr. WIGGINS. That's correct.

Mr. HURD. Mr. Pitkin, if Mr. Wiggins did not give or grant an ATO, what would happen to that project?

Mr. PITKIN. We would look at reducing funding for it during the budget process, either in formulation or execution. If there were some other mitigating factor, of course, the subject group would have a chance to raise that issue. But of course the CIO would still have that ultimate authority.

Mr. HURD. So is not giving an ATO, is that the equivalent of trying to halt a program?

Mr. PITKIN. I am not an expert in the authorities, but that's how I would interpret it. But he may have a better——

Mr. HURD. Mr. Wiggins, do you have something to comment?

Mr. WIGGINS. Yes, but there are a couple of ways we get at that. We also have a capital investment process that looks at individual projects as they are brought to us. There is a preselect, select, control, and then review process. So we can stop projects in their tracks right there. Also through the advanced PIT process.

The ATO authority, as a DAA, the designated authority, authorizing official, I can stop things in their tracks, and I have done it, in particular with cloud offerings. There was a big rush to the cloud, but we put in place governance, the CCGB, as I mentioned earlier, and if something has not gone through the CCGB I do not give it an ATO and it should not exist either externally to our network in the cloud or internally within any of our networks.

Mr. HURD. Good copy. Mr.

Fulghum, how does the process work at DHS.

Mr. FULGHUM. Depending on the circumstances surrounding, if it's a renewal of an ATO or an initial issue of an ATO and what he recommends, we would take corresponding budgetary action.

Mr. HURD. Good copy.

I would like to thank our witnesses for taking the time today to appear before us. I think this is our first hearing that wasn't interrupted by votes, makes it our last one of the year. If there is no further business, without objection, the subcommittee stands adjourned.

[Whereupon, at 3:57 p.m., the subcommittees were adjourned.]

○