18F AND U.S. DIGITAL SERVICE OVERSIGHT

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

JUNE 10, 2016

Serial No. 114–115

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

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18F AND U.S. DIGITAL SERVICE OVERSIGHT

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Friday, June 10, 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 9:32 a.m., in Room 2154, Rayburn House Office Building, Hon. Will Hurd [chairman of the Subcommittee on Information Technology] presiding.

Present: Representatives Hurd, Meadows, Farenthold, Walberg, Walker, Jordan, Blum, Buck, Carter, Grothman, Chaffetz (ex officio), Kelly, Connolly, and Maloney.

Mr. HURD. 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.

Good morning, y'all. The IT and Government Operations subcommittees have constantly highlighted a need for IT reform at large and the waste, fraud, and abuse that comes along with it. For real reform to happen, the Federal Government needs talented, experienced people to work on IT projects that are bigger than themselves.

There is no question that there's a need to reform outdated laws, and the current procurement structure prevents the proverbial two guys or two gals in a garage from selling technology to the Federal Government when often their product may be cheaper and more innovative than another solution. It should be much easier for startups and small companies to sell to and work with the Federal Government.

We need fresh ideas and an outside-the-box thinking to permeate all levels of government. 18F was launched just over 2 years ago with 15 staff members. Today, 18F has 185 staff members and growing and has transformed into an entirely new division within the GSA, complete with its own commissioner and budget.

How did that happen? What was its original mission? What is its current mission? Is it achieving its stated purpose to make the government's digital services, simple, effective, and easier for the American people? If not, what can we change to ensure it does? Because that is the goal I think all of us are here today to support.

Additionally, I have concerns about the funding mechanism with which 18F is supported. As the GAO notes, 18F is to recover costs to the Acquisition Services Fund and is required to have a plan to

achieve full costs recovery. Recent report suggests that it may be doing just the opposite.

Today, I hope that we can gain a more transparent view of 18F's mission and its full scope of their activities. The United States Digital Service was formed in the wake of a failure of the launch of healthcare.gov to procure the outside talent—tech talent that was needed to make the Web site operational. The stated mission is to improve and simplify the digital experience that people and businesses have with their government.

I'm concerned with potential duplication and overlap. This committee is well aware of the costs associated with the duplicative and overlapping programs. And let me assure you, we don't need two more.

This committee has held numerous hearings this Congress with agency CIOs as witnesses primarily focused on the state of IT and cybersecurity at agencies and the implementation of FITARA, and we will continue to do so and hold agency CIOs accountable. FITARA is important because it will give CIOs greater budget authority and empower them to make bold decisions. But with the power also comes accountability. We will hold CIOs accountable for their decisions.

Under FITARA, nothing of any significance related to IT should be happening at agencies without the involvement and signoff of agency CIOs, period. I'm concerned by reports that USDS teams may parachute into an agency, fix whatever they perceive was the problem, and then leave without the full buy-in and involvement of the agency CIO. That should never happen. It is contrary to the entire purpose of FITARA.

I hope to hear today concrete steps USDS is taking to ensure they involve agency CIOs from the beginning when working on a project at an agency. As usual, Mr. Powner and GAO have done great work in this area, and I would highly advise both 18F and USDS to implement GAO's recommendations.

As I've said before, taxpayers deserve a government that leverages technology to serve them rather than one that deploys unsecured, decades-old technology that places their sensitive and personal information at risk. They also deserve a Federal Government that is transparent. We can harness power of the cloud. We can upgrade our legacy systems. We can get smart people to come work for the Federal Government. We can do all this because, despite our problems, America is still a country of innovators. If 18F and USDS can help us achieve an efficient and transparent government worthy of its people and do so in a way that is clear, cost-effective, measurable, and appropriate for a government role, then I'm very open in supporting them. However, these conversations will help give us a clearer view and inform us on whether they need to be restructured, reformed, or restricted.

And I thank the witnesses for being heard today and look forward to their testimonies and hearing specific ways we can bring cutting-edge technology and technology talent into the Federal Government.

I now would like to recognize my friend, the gentlewoman from the great State of Illinois and the ranking member of the Subcommittee on Information Technology, for her opening.

Ms. Kelly, you are recognized for 5 minutes.

Ms. KELLY. Thank you, Chairman Hurd, for holding this important hearing, and thank you to our witnesses for taking the time to be here this morning.

As we all know, the Federal Government relies on information technology in countless ways. Most importantly, Americans rely on IT to access services and connect with the government, from signing up for health care to applying for student loans to securing veterans' benefits. And when the government's IT services aren't working, the government is isn't working. We've learned this from our experience with healthcare.gov and other recent IT challenges.

Although the Affordable Care Act is much more than a Web site, we saw what happened when we try to implement good policy without the underlying IT structure to support it. That's why the administration created the U.S. Digital Service and 18F.

The stated goals of USDS and 18F are to improve and modernize government IT operations and help the government become better at procuring, developing, and sharing IT going forward. These are worthy goals. And the USDS and 18F have made great strides toward reaching them.

For example, USDS has helped the Department of Homeland Security launch an online immigration review process. This is the project that DHS has been working on for nearly a decade at a cost of $1 billion. 18F is in the process of developing a new IT acquisition process that will make it easier for Federal agencies to contract with vendors that provide agile software development services.

I look forward to hearing more about these and other success stories today. One of the greatest achievements of the Digital Service and 18F has been the ability to attract and recruit incredible talent from the tech industry into the Federal Government.

At almost every hearing we hold, I ask agency heads to list some of their greatest challenges, and without fail, we hear about the challenges of recruiting and retaining a talented IT workforce. I have been impressed by 18F and USDS' ability to open the door to public service in one of our fastest growing industries. These employees are using the knowledge, skills, and experience they've gained in the private sector to help improve Federal IT.

In addition to recruiting the best and the brightest in tech talent, we need to continue leveraging the resources and expertise, that of our partners in the private sector. They are eager to help bring Federal IT into the 21st century.

I look forward to hearing from the witnesses and how the mission of these offices differs from what the private sector offers through government contracts. What value added do these programs bring? How are your roles changing? And what limitations do you face? But in order for the Digital Service and 18F to fully realize their potential, they need to be transparent about the good work they are doing. They should also continue to engage stakeholders and Congress so we can all understand the important role they play in modernizing Federal IT and help shape the role going forward.

Thank you, again, to our witnesses for being here and to my colleagues for holding this important hearing.

I yield back.

Mr. HURD. Thank you. And I'll hold the record open for 5 legislative days for any members who would like to submit a written statement.

I will now recognize our panel of witnesses.

I'm pleased to welcome Mr. Mikey Dickerson, Administrator of the U.S. Digital Service.

Thank you for being here, sir.

Ms. Phaedra Chrousos, a Commissioner of the Technology Transformation Service at the Government Services Administration.

Thanks for being here and thank you for the information you and your staff have provided us in advance of this hearing. Very important to understand what y'all are doing and help us with our oversight role and make sure we can support y'all on the activities. So that kind of back-and-forth is really important.

Mr. A.R. "Trey" Hodgkins, senior vice president, Public Sector, at the Information Technology Alliance for the Public Sector.

Thank you for being here.

And Mr. David LeDuc, senior director of policy—public policy at the Software and Information Industry Association.

Appreciate you being here.

And, last but not least and number one in our hearts, Mr. David Powner, Director of IT Management Issues at the U.S. Government Accountability Office.

Always a pleasure to have you here today, sir.

Welcome to you all.

And pursuant to committee rules, all witnesses will be sworn in before they testify.

So 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?

Let the record reflect the witnesses answered in the affirmative. In order to allow time for discussion, I would appreciate if y'all would limit your testimony to 5 minutes. Your entire written statement will be made part of the record.

Now, I would like to recognize Mr. Dickerson for your opening statement. You are recognized for 5 minutes.

WITNESS STATEMENTS

STATEMENT OF MIKEY DICKERSON

Mr. DICKERSON. Thank you, Mr. Chairman.

Chairman Hurd, Ranking Member Kelly, Chairman Meadows, Ranking Member Connolly, and all members of the subcommittees, thank you for the opportunity to appear before you today.

Millions of people interact with the United States Government every day, relying on digital products such as Web sites, online forms, and mobile apps to access and understand government services. Americans are accustomed to the high standards of service set by the private sector, but outdated technology and complicated user interfaces can sometimes make interactions with the government frustrating and inefficient.

Americans deserve simple, effective digital services. We are in a new era of technology and innovation in the U.S. Government, and we are using the latest technology to deliver better services, engage Americans, and tackle tough challenges. President Obama launched the United States Digital Service less than 2 years ago as a means to improve our Nation's most important public-facing digital services. The U.S. Digital Service, or USDS, is a collaboration between our country's top technical talent and product design and software engineering and the government's brightest leaders and civil servants who work in partnership to apply private sector best practices to our digital services.

In 2014, the small team of technologist initially planned to focus on three projects, but with additional funding and support of Congress starting in fiscal year 2015, the size and scope of the USDS has increased. Today, the USDS has small teams working on high-priority projects with a number of agencies across the government.

The work of USDS is centered on four main goals. First and foremost is to transform critical services. The USDS is focused on improving our Nation's most important public-facing services. The team helps to manage technology projects working alongside civil servants and IT contractors.

The second goal is to rethink how we build and buy digital services. The USDS is working to modernize procurement processes and practices for the digital era by developing training programs and tools that enable Federal contracting officers to apply industry best practices to digital procurements. By increasing the technical knowledge and expertise of contracting officers, the Federal Government can partner more effectively with the IT private sector who will continue to deliver the majority of the government's digital services just as they do today.

Our third goal is to initiate the development of common platforms and standards. The USDS is working to identify pilot opportunities for common platforms that can improve services needed by multiple agencies.

And our fourth goal is in support of the others, is to bring to bring top technical talent into public service. In support of these goals, the USDS plans to bring 200 digital service experts into the Federal Government by the end of 2017.

The long-term goal is to build and sustain institutional capacity within agencies while simultaneously encouraging a tradition of public service in the tech professions.

In the short amount of time that USDS has been operating, we have seen success in many projects, especially under the following circumstances: when the USDS team is small and focused on a high-priority project; when agency leadership is engaged and supportive; when the USDS team is tightly integrated with existing contractors and career staff; when the project has a hard decline; and when the project has crossed agency dependencies or many stakeholders across the government.

While the USDS is still a very new program, we've already seen early results in improving services for the public. For example, vets.gov is a single unified digital experience to provide veterans access to the information they need about the VA's benefits, such as educational assistance, health care, and economic opportunities.

We are also pleased with the college scorecard, a tool that helps students and their families make better decisions about where to go to college by publishing comprehensive, reliable data on students' employment outcomes and success in repaying their student loans.

By applying the best practices in technology and design to the Federal Government, the USDS helps enable delivery of more reliable and effective digital services to the American public. Through the recruitment of top technology talent from one of the most competitive industries in the world, the USDS is inspiring a tradition of public service in the tech professions which will help the Federal Government continue to deliver crucial services.

I thank the committee for holding this hearing and for your commitment to providing top notch digital services to the American people. I am pleased to answer your questions.

[Prepared statement of Mr. Dickerson follows:]

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, DC 20503
www.whitehouse.gov/omb

TESTIMONY OF MIKEY DICKERSON
ADMINISTRATOR OF U.S. DIGITAL SERVICE
OFFICE OF MANAGEMENT AND BUDGET
BEFORE THE SUBCOMMITTEES ON
INFORMATION TECHNOLOGY AND ON GOVERNMENT OPERATIONS OF THE
COMMITTEE ON OVERSIGHT AND GOVERNMENT REFORM
UNITED STATES HOUSE OF REPRESENTATIVES

June 10, 2016

Chairman Hurd, Ranking Member Kelly, Chairman Meadows, Ranking Member Connolly, and Members of the Subcommittees, thank you for the opportunity to appear before you today.

Done right, digital reform is government reform

Millions of people interact with the United States government every day, relying on digital products such as websites, online forms, and mobile apps, to access and understand government services. Americans are accustomed to the high standards of service set by the private sector, but outdated technology and complicated user interfaces can sometimes make interactions with the government frustrating and inefficient. Americans deserve simple, effective digital services. We are in a new era of technology and innovation in the U.S. Government, and we are using the latest technology to deliver better services, engage Americans, and tackle tough challenges.

Creation of the U.S. Digital Service

President Obama launched the United States Digital Service (USDS) less than two years ago as a means to improve our Nation's most important public-facing digital services. The USDS is a collaboration between our country's top technical talent in product design and software engineering and the government's brightest leaders and civil servants, who work in partnership to apply private sector best practices our digital services. In 2014, the small team of technologists initially planned to focus on three projects, but with additional funding and the support of Congress starting in FY 2015, the size and scope of the USDS has increased steadily. Today, the USDS has small teams working on high-priority projects with a number of agencies across government, such as the Departments of Veterans Affairs, State, Education, Homeland Security, Health and Human Services, Defense; the Internal Revenue Service; and the Small Business Administration.

The work of the USDS is centered on four main goals:

- **Transform Critical Services.** The USDS is focused on measurably improving our Nation's most important public-facing services. The team helps to manage technology projects, working alongside civil servants and IT contractors, relying on (1) a user-centered design framework that prioritizes the needs, wants, and limitations of users; and (2) agile software development practices that enable iterative development and the ability to rapidly respond to change and feedback.

- **Rethink How We Build and Buy Digital Services.** The USDS is working on modernizing procurement processes and practices for the modern digital era. For example, the USDS has developed training programs and tools to enable federal contracting officers to apply industry best practices to digital procurements, and serve as expert advisors to their CIOs on procurements. Improving procurement processes and practices with our partners in the IT contracting community will remain a critical element of modernizing our government, as skilled contractors will continue to deliver the majority of the government's digital services, just as they do today.

- **Initiate the development of common platforms and standards.** The USDS is working to identify pilot opportunities for common platforms that can improve services needed by multiple agencies.

- **Bring top technical talent into public service.** In support of these goals, a specialized talent acquisition team is working to recruit and place over 200 Digital Service Experts by the end of 2017, to join the government for term-limited tours of duty with the USDS, during which they will work with civil servants inside agencies. Since the launch of our online application in January 2015, thousands have applied to join the USDS, with more than 150 currently serving. The long-term goal is to build and sustain institutional capacity within agencies while simultaneously encouraging a tradition of public service in the tech industry.

In the short amount of time that the USDS has been operating, we have seen success in many projects, especially under the following circumstances:

- The USDS team is small, and focused on a high priority project.
- Agency leadership is engaged and supportive.
- The USDS team is tightly integrated with existing contractors and career staff.
- The project has a hard deadline.
- The project may have cross-agency dependencies, or many stakeholders across the government.

While the USDS is still a very new program, we are already seeing early results in improving services for the public. For example:

- **Building a single unified digital experience for all veterans accessing programs at the U.S. Department of Veterans Affairs** – Together with the VA, the USDS built a

new website – Vets.gov – to provide a simple, easy-to-use platform for veterans to access the information they need about the VA's benefits, educational assistance, economic opportunities, and additional tools.

- **Helping students choose the right college** – With the Department of Education, the USDS built a new tool – The College Scorecard – to help students, families, and their advisers make better decisions about where to go to college. The tool includes the most comprehensive, reliable data published on students' employment outcomes and success in repaying student loans. More than 1.4 million people have visited the College Scorecard, and the data powering the College Scorecard has been accessed over 9.4 million times in 7 months.

- **Saving small businesses time and money** – The USDS assisted the Small Business Administration in establishing an agile procurement to modernize technology to streamline the certification process. The newly launched Certify.SBA.gov saves small businesses time and money, and provides small businesses access to federal contracts and capital more efficiently.

Conclusion

By applying the best practices in technology and design to the Federal government, the USDS helps enable the delivery of more reliable and effective digital services to the American public. Through the recruitment of top technology talent from one of the most competitive industries in the world, the USDS is inspiring a tradition of public service in the tech industry – similar to traditions of service we see in other sectors, such as law and medicine – which will help the Federal government continue to deliver crucial services. I thank the Committee for holding this hearing, and for your commitment to providing top-notch digital services to the American people. I am pleased to answer any questions you may have.

Mr. HURD. Thank you, Mr. Dickerson.

Now, Ms. Phaedra Chrousos, you are recognized for 5 minutes.

STATEMENT OF PHAEDRA S. CHROUSOS

Ms. CHROUSOS. Thank you.

Good morning, Chairmen Hurd and Meadows, Ranking Members Kelly and Connolly, and members of the committee. Thank you for inviting me to speak with you today. I left the private sector 2 years ago to join the Federal Government's efforts to improve the public's experience with the government. Having founded and successfully led to two Internet companies prior to joining public service, I am particularly excited to speak with you about 18F, an organization that is helping bring government closer to the technology practices and methodologies of the private sector.

As you know, GSA's mission includes providing the best value and technology to the Federal Government and the American people. The work of 18F is a vital part of that mission.

In March 2014, recognizing that too many of our government's digital services are not designed to meet the needs of the people who use them, are not delivered on time, and are often over budget, GSA launched 18F, a 15-person startup within its agencies. In the last 2 years, 18F has grown to 185 people, attracting cutting-edge technologists from both the industry and the public sector and has worked on more than 150 projects with 63 Federal entities. The organization has also evolved its service offering to respond to the technology needs of its agency customers. This 2-year-old start-up is making progress towards its mission of making the government's digital services simple, effective, and easier to use for the American people.

I would like to highlight just one example of 18F's work. In June of 2014, 18F signed its very first interagency agreement with the Federal Election Commission that asked for help in making the 90 million records they housed more readily accessible to the public. It was the first time FEC had worked with an agile user-centered team like 18F, and our work has transformed the way they approach technology today. In the words of our partners at FEC: We got so much more than a Web site. We had a complete culture change about how to do user-centered design in agile. This product embodies the way 18F works: a focus on data, a close partnership with stakeholders and users, building in the open, and the opportunity for the transformation of practices and processes within our customer agencies.

Early on, during engagement such as this one with the FEC, 18F recognized that a team of in-house technologists and governments simply cannot on its own rebuild the Federal Government's vast information technology systems. We also needed to partner with the private sector.

One of 18F's first joint efforts with GSA's Federal Acquisition Service was the creation of the Agile Blanket Purchase Agreement, a new contract vehicle designed to provide 18F and their agency customers access to the innovative technical talent that exists in the private sector today. 18F's partnership with the private sector is integral to the success of its efforts and is crucial for scaling this organization's impact across the Federal Government.

The promise of 18F's work aside, I recognize that this young organization has room to improve its operations significantly. 18F was launched as a startup in government 2 years ago, and the organization is learning while it scales and matures. The insightful analysis and recommendations put forward by the Government Accountability Office will contribute to our learning and help 18F become a stronger organization. We value transparency and welcome continued oversight of all of our efforts from GAO, the GSA inspector general, and this committee.

I would like to close by emphasizing that the scale and scope of the technology challenges facing Federal agencies is larger than 18F could ever address on its own. As the committee noted in a recent hearing, the need for the Federal Government to improve its technology is imperative to creating a government that's transparent, effective, responsive, and secure. Addressing the challenges we face in this area demands continued leadership and close partnership with the Office of Management and Budget, Federal agencies, and the private sector, which will continue to play a critical role in delivering technology solutions that agencies need.

Thank you for the opportunity to speak with you today, and I look forward to answering your questions.

[Prepared statement of Ms. Chrousos follows:]

**STATEMENT OF
MS. PHAEDRA CHROUSOS
COMMISSIONER
TECHNOLOGY TRANSFORMATION SERVICE
U.S. GENERAL SERVICES ADMINISTRATION
BEFORE THE
SUBCOMMITTEE ON INFORMATION TECHNOLOGY
AND
SUBCOMMITTEE ON GOVERNMENT OPERATIONS
OF THE HOUSE COMMITTEE ON OVERSIGHT AND GOVERNMENT REFORM**

"18F AND U.S. DIGITAL SERVICE OVERSIGHT"

June 10, 2016

Good morning Chairmen Hurd and Meadows, Ranking Members Kelly and Connolly, and members of the Committee. My name is Phaedra Chrousos, and I am the Commissioner of the Technology Transformation Service (TTS) at the U.S. General Services Administration (GSA), which includes 18F. Thank you for inviting me to this hearing concerning 18F's efforts to improve the way government uses information technology. GSA's mission includes providing the best value in technology services to government and the American people, and the work of 18F is a vital part of this mission.

What is 18F?
18F is a fee-based digital consultancy inside GSA's Technology Transformation Service. 18F's mission is to make the government's digital services simple, effective, and easier to use for the American people. GSA recruits cutting-edge technologists and designers from industry and the public sector to help drive efficiency and transparency, deliver cost savings, and help federal agencies buy, build, and deploy technology the way the private sector does today. Launched in March 2014 with a team of 15 staff, 18F has grown to more than 185 software engineers, designers, and other innovation specialists and support staff as demand for services has increased.

What does 18F deliver?
18F is working with agencies to change the way the government approaches technology in the following ways:

1. **We partner with agencies to build prototypes, web applications, and software that model ways to use modern technology methods and practices used by top technology companies.** For example, we partnered with

the Federal Election Commission to transform its legacy website with dense information and navigation difficulties. 18F launched beta.FEC.gov, a new website with an improved interface that provides better access to the public to a wide variety of data. This project embodies the way 18F works: a focus on data, a close partnership with stakeholders and users, building in the open, and the opportunity for the transformation of practices and processes with our partner agencies.

2. **We provide acquisition services to help our agency partners become smarter buyers of private sector technology services and products.** 18F has partnered with GSA's Federal Acquisition Service to award the Agile Blanket Purchase Agreement (BPA), a contract that connects 18F and our agency partners to vendors, including a number of small businesses that specialize in agile delivery services. 18F is working closely with the BPA vendors to continue to use innovative approaches to improve the acquisition process for vendors and agencies alike to deliver results for our agency partners.

3. **We build shared technology platforms that can be used across the government to address common challenges.** For example, we are developing cloud.gov, a platform built on an industry-backed, open-source solution that helps our agency partners access cost-effective vendor-supplied cloud infrastructure services.

4. **We provide agency partners with education, workshops, training, outreach, and communication tools to help them develop core capacities for building and managing digital services in the government.** For example, in two days, our consultants worked with a team at the Department of Labor's Wage and Hour Division to take the printed Field Operations Handbook and create an internal prototype of an online, searchable version.

To date, 18F has worked on more than 150 projects with 63 federal entities. Our work to date shows that the application of modern technology approaches is helping agencies spend more wisely and improve interactions between the American people and their government.

The Path Forward

18F was launched as a start-up in government, and as is the case with start-ups in the private sector, we are learning to scale, mature, and improve 18F as an organization. We value transparency and welcome continued independent oversight of all our efforts.

The scale and scope of the technology challenges facing federal agencies are larger than 18F will be able to address on its own. Addressing the challenges we face in this area demands continued leadership and close partnership with the Office of Management and Budget, including the Office of the Federal Chief Information Officer, other federal agencies, and the private sector, which will continue to play a critical role in delivering the technology solutions agencies need.

GSA has often been the first to take the innovative lead when it comes to technology in the federal space, just as we were one of the first agencies to put the internet on every desk 20 years ago, and the first agency to move to the cloud five years ago. We look forward to continuing to provide cutting-edge technology support to our partner agencies and bringing the government's digital services in line with the best private sector services.

The American public deserves a government that is transparent, effective, responsive, and secure. As we continue to find ways to improve the way the federal government delivers, buys, uses, and shares technology and digital services, 18F, and all of GSA, will continue to play a strong role in improving and modernizing the way we do so.

GSA appreciates your interest in and oversight of this important program, and I will be happy to answer any of your questions.

Mr. HURD. Thank you.

Mr. Powner, you are recognized now for 5 minutes for your opening remarks.

STATEMENT OF DAVID POWNER

Mr. POWNER. Chairman Hurd, Ranking Member Kelly, and members of the subcommittees, thank you for having us testify on our ongoing work looking at GSA's 18F and OMB's U.S. Digital Services. For each of these organizations, I will provide a brief overview, positive developments, and areas that we believe need improvements.

Starting with 18F, it was established in March 2014. Its mission is to transform the way the Federal Government builds and buys digital services. Agencies come to 18F for their services and pay for these services since 18F is funded out of revolving fund within GSA. Therefore, it operates on revenue generated from its business instead of an appropriation. Their plan is to start having full cost recovery in 2019. 18F has over 170 staff and has worked with approximately 20 agencies on more than 30 projects. These projects include building secure Web sites, obtaining cloud services, and providing consulting and training on agile practices.

18F has worked on some major IT projects like the U.S. immigration transformation and the VA benefits delivery system. They also have two initiatives where agencies will be able to quickly access agile and cloud services. Our customer satisfaction survey showed that most customers were pleased with their services.

We think they could do a better job on defining outcome-oriented goals and performance measures. During the course of our review, they developed these goals and measures. Some of these are good, like saving $250 million and having a 90-percent customer satisfaction score, but others, like growing their staff to over 200, are not outcome-oriented. We also think there should be measures and targets for full cost recovery. 18F acknowledges that these goals and metrics need further development.

Now turning to USDS, it was established in August 2014. Its mission is to transform the most important digital services for citizens. USDS typically goes to agencies, and they do not charge agencies for their services because they have an appropriation. For fiscal year 2016, they plan to spend about $14 million.

USDS has about 100 staff within OMB. It has worked with approximately 11 agencies on about 15 projects. These projects include information security assessments, system stabilization, and software engineering.

USDS has worked on seven major IT projects, including U.S. immigration transformation and SSA's disability case processing. A much higher percentage of their work is associated with large IT acquisitions when compared to 18F. Our customer satisfaction survey showed that all customers that responded were satisfied with their services.

Similar to 18F, USDS could do a better job defining outcome-oriented goals and performance measures. During the course of our review, these goals and measures were developed. Some are good, like measurably improving five to eight of the government's most important citizen-facing services, but others, like increasing the

quality and quantity of technical vendors, are not outcome-oriented.

We also think USDS' continued focus on the highest priority Federal IT projects that are to be identified quarterly to the Appropriation Committees is important.

Finally, as USDS establishes agency digital service teams, it is critical that these relationships with—is consistent with CIOs and what is currently in FITARA and all the oversight that your subcommittees have performed to strengthen CIO authorities. We have concerns about some of these agency teams doing an end-around the CIO organizations.

In conclusion, it is important that these two organizations clearly demonstrate their value by improving performance measures. 18F needs to continue to work toward full cost recovery while USDS needs to ensure that agency digital service teams do not undermine the CIO authorities that are being bolstered with FITARA.

This concludes my statement. I look forward to your questions.

[Prepared statement of Mr. Powner follows:]

GAO Highlights

DIGITAL SERVICE PROGRAMS

Assessing Results and Coordinating with Chief Information Officers Can Improve Delivery of Federal Projects

Why GAO Did This Study

In an effort to improve IT across the federal government, in March 2014 GSA established a team, known as 18F that provides IT services to agencies. In addition, in August 2014 the Administration established USDS, which aims to improve the federal IT services provided to citizens. OMB also required agencies to establish their own digital service teams.

GAO was asked to summarize its draft report that (1) describes 18F and USDS efforts to address problems with IT projects and agencies' views of services provided, (2) assesses these programs' efforts against practices for performance measurement and project prioritization, and (3) assesses agency plans to establish their own digital service teams. In preparing the draft report on which this testimony is based, GAO reviewed 32 18F projects and 13 USDS projects that were underway or completed as of August 2015 and surveyed agencies about these projects; reviewed 18F and USDS in key performance measurement and project prioritization practices; reviewed 25 agencies' efforts to establish digital service teams; and reviewed documentation from four agencies, which were chosen based on their progress made in establishing digital service teams.

What GAO Recommends

GAO's draft report includes two recommendations to GSA and three recommendations to OMB to improve goals and performance measurement. In addition, GAO's draft report is recommending that OMB update USDS policy to define the relationships between CIOs and digital services teams.

View GAO-16-733T. For more information, contact David A. Powner at (202) 512-9286 or pownerd@gao.gov.

What GAO Found

In a draft report, GAO determined that the General Service Administration's (GSA) 18F and Office of Management and Budget's (OMB) U.S. Digital Service (USDS) have provided a variety of services to agencies supporting their information technology (IT) efforts. Specifically, 18F staff helped 18 agencies with 32 projects and generally provided development and consulting services, including software development solutions and acquisition consulting. In addition, USDS provided assistance on 13 projects across 11 agencies and generally provided consulting services, including quality assurance, problem identification and recommendations, and software engineering. Further, according to GAO's survey, managers were generally satisfied with the services they received from 18F and USDS on these projects (see table).

Results of GAO Survey on Satisfaction with Digital Services Projects

Program	Very satisfied	Moderately satisfied	Neither satisfied nor dissatisfied	Moderately dissatisfied	No response
18F	16	7	0	3	5
U.S. Digital Service	6	3	0	0	4

Source: GAO survey of agency project managers that engaged with 18F and USDS. | GAO-16-733T

Both 18F and USDS have partially implemented practices to identify and help agencies address problems with IT projects. Specifically, 18F has developed several outcome-oriented goals and related performance measures, as well as procedures for prioritizing projects; however, not all of its goals are outcome-oriented and it has not yet fully measured program performance. Similarly, USDS has developed goals, but they are not all outcome-oriented and it has established performance measures for only one of its goals. USDS has also measured progress for just one goal. Further, it has not fully implemented its procedures for prioritizing projects. Until 18F and USDS fully implement these practices, it will be difficult to hold the programs accountable for results.

Agencies are beginning to establish digital service teams. Of the 25 agencies that requested funding for these teams, OMB has established charters with 6 agencies for their digital service teams. In addition, according to the USDS Deputy Administrator, USDS plans to establish charters with an additional 3 agencies by the end of the fiscal year—the Department of Education, as well as the Social Security Administration and Small Business Administration. For the remaining 16 agencies, as of April 2016, 8 agencies reported that they plan to establish digital service teams but have yet to establish charters with USDS. The other 8 agencies reported that they do not plan to establish digital service teams by September 2016 because they did not receive requested funding. Further, of the four agencies GAO selected to review, only one has defined the relationship between its digital service team and the agency Chief Information Officer (CIO). This is due, in part, to the fact that USDS policy does not describe the expected relationship between CIOs and these teams. Until OMB updates its policy and ensures that the responsibilities between the CIOs and digital services teams are clearly defined, it is unclear whether CIOs will be able to fulfill their statutory responsibilities with respect to IT management of the projects undertaken by the digital service teams.

_____ **United States Government Accountability Office**

GAO U.S. GOVERNMENT ACCOUNTABILITY OFFICE
441 G St. N.W.
Washington, DC 20548

Chairmen Meadows and Hurd, Ranking Members Connolly and Kelly, and Members of the Committees

Thank you for the opportunity to participate in today's hearing on the General Services Administration's (GSA) 18F and the Office of Management and Budget's (OMB) U.S. Digital Service (USDS) programs. Information systems are critical to the health, economy, and security of the nation. To support these systems, the federal government plans to invest more than $89 billion on information technology (IT) in fiscal year 2017. However, prior IT expenditures too often have produced failed projects—that is, projects with multimillion dollar cost overruns and schedule delays measured in years, with questionable mission-related achievements. 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.[1]

In an effort to improve federal IT management, in March 2014 the General Services Administration (GSA) established 18F,[2] a team that provides IT services (e.g., develop websites and provide software development training) to federal agencies on a reimbursable basis. Similar to 18F, in August 2014 the Administration established the U.S. Digital Service (USDS) within the Office of Management and Budget (OMB), which aims to improve the federal IT services that citizens rely on the most. In addition, the President's Budget for fiscal year 2016 proposed funding for agencies to establish their own agency digital service teams.

As requested, this statement summarizes key preliminary findings based on our draft report reviewing 18F and USDS, as well as agency digital service teams, that (1) describes 18F and USDS efforts to identify and address problems with IT projects and agencies' views of services provided, (2) assesses these programs' efforts against practices for performance measurement and project prioritization, and (3) assesses agency plans to establish their own digital service teams. The draft report

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[1]GAO, *High-Risk Series: An Update*, GAO-15-290 (Washington, D.C.: Feb. 11, 2015).

[2]The name of the 18F program references its office location: Northwest Washington, D.C., at 18th and F Streets.

is currently out for comment with selected agencies. We anticipate issuing the report in July 2016.

In that report, for our first objective, we reviewed 32 projects across 18 agencies for which 18F provided services to agencies,[3] and 13 projects at 11 agencies for which USDS provided services. To identify the projects, we obtained the list of completed and ongoing projects at agencies for which 18F and USDS provided services, as of August 2015 and removed projects without agency customers (e.g., internal projects and development of guides for other agencies). We then analyzed information obtained from the projects describing the services each of the selected projects received from 18F and USDS. We also conducted a customer satisfaction survey of the managers of all selected projects to determine their level of satisfaction with the services provided by USDS and 18F. Although the survey responses cannot be used to generalize the opinions and satisfaction of all customers that receive services from 18F and USDS programs, the responses provide data for our defined population.

To address the second objective, we compared 18F and USDS policies procedures, plans, and practices to leading practices identified by federal law and GAO on performance measurement[4] and project prioritization.[5]

To address our third objective, we administered a data collection instrument on plans to establish digital service teams to the 25 agencies

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[3]We did not review projects associated with the Presidential Innovation Fellows program, which is administratively housed within 18F but largely operates as a separate program.

[4]The GPRA Modernization Act of 2010, 5 U.S.C. § 306, 31 U.S.C. §§ 1115-1116 & 1120-1124; GAO, *Executive Guide: Effectively Implementing the Government Performance and Results Act*, GAO/GGD-96-118 (Washington, D.C.: June 1, 1996); and *Designing Evaluations: 2012 Revision*, GAO-12-208G (Washington, D.C.: Jan. 31, 2012).

[5]GAO, *Information Technology Investment Management: A Framework for Assessing and Improving Process Maturity (Supersedes AIMD-10.1.23)*, GAO-04-394G (Washington, D.C.: March 2004).

with funding proposed in the President's Budget for fiscal year 2016.[6] Additionally, we reviewed USDS's plans—to include interviews with USDS officials—for providing assistance to agencies that planned to establish a digital service team in fiscal year 2016.

In addition, we selected four agencies as case studies to review the relationships between agency Chief Information Officers (CIO) and agency digital service teams. To choose these agencies, we identified the three agencies that had established a charter with USDS as of January 2016—the Departments of Defense, Homeland Security, and State. We also selected the Department of Veterans Affairs because, as of January 2016, it had the most staff of any agency digital service team.[7] For these agencies, we evaluated agency policies and procedures to determine the extent to which agencies had documented the relationships between digital service teams and agency CIOs. We also conducted interviews with the CIOs of the Departments of Defense, Homeland Security, and State, as well as the Veterans Affairs Principal Deputy Assistant Secretary for the Office of Information and Technology.[8] More information on our scope and methodology can be found in the report we are issuing next month.

The work upon which this testimony is based is being conducted 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

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[6]The 25 major departments and agencies with funding proposed for digital service teams in the President's Budget for fiscal year 2016 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 Archives and Records Administration, National Science Foundation, Nuclear Regulatory Commission, Office of Personnel Management, Small Business Administration, Social Security Administration, and U.S. Agency for International Development.

[7]In May 2016, VA established a charter with USDS for its digital service team.

[8]We requested an interview with the Veterans Affairs Assistant Secretary for Information and Technology, who is the CIO for the department. In lieu of meeting with the CIO, the department instead made the Principal Deputy Assistant Secretary for the Office of Information and Technology available for an interview.

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

Background

Investments in IT can enrich people's lives and improve organizational performance. During the last two decades the Internet has matured from being a means for academics and scientists to communicate with each other to a national resource where citizens can interact with their government in many ways, such as by receiving services, supplying and obtaining information, asking questions, and providing comments on proposed rules.

However, while these investments have the potential to improve lives and organizations, some federally funded IT projects can—and have—become risky, costly, unproductive mistakes. We have previously testified that the federal government has spent billions of dollars on failed and troubled IT investments,[9] such as

- the Office of Personnel Management's Retirement Systems Modernization program, which 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;

- the tri-agency[10] National Polar-orbiting Operational Environmental Satellite System, which 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;[11]

[9]GAO, *Information Technology: Additional Actions and Oversight Urgently Needed to Reduce Waste and Improve Performance in Acquisitions and Operations*, GAO-15-675T (Washington, D.C.: June 10, 2015).

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

[11]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).

- the Department of Veterans Affairs' Scheduling Replacement Project, which was terminated in September 2009 after spending an estimated $127 million over 9 years; and

- the Department of Health and Human Services' (HHS) Healthcare.gov website and its supporting systems, which were to facilitate the establishment of a health insurance marketplace by January 2014, encountered significant cost increases, schedule slips, and delayed functionality. In a series of reports we identified numerous planning, oversight, security, and system development challenges faced by this program and made recommendations to address them.[12]

In light of these failures and other challenges, last year we introduced a new government-wide high-risk area, Improving the Management of IT Acquisitions and Operations.[13]

Digital Service Teams Are Intended to Improve the Federal Government's IT Efforts

18F and USDS were formed in 2014 to help address the federal government's troubled IT efforts. Both programs have similar missions of improving public-facing federal digital services.[14]

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[12]See GAO, *Healthcare.gov: CMS Has Taken Steps to Address Problems, but Needs to Further Implement Systems Development Best Practices*, GAO-15-238 (Washington, D.C.: Mar. 4, 2015); *Healthcare.gov: Actions Needed to Address Weaknesses in Information Security and Privacy Controls*, GAO-14-730 (Washington, D.C.: Sept. 16, 2014); and *Healthcare.gov: Ineffective Planning and Oversight Practices Underscore the Need for Improved Contract Management*, GAO-14-694 (Washington, D.C.: July 30, 2014).

[13]GAO, *High-Risk Series: An Update*, GAO-15-290 (Washington, D.C.: Feb. 11, 2015).

[14]OMB defines digital services as the delivery of digital information (data or content) and transactional services (e.g., online forms and benefits applications) across a variety of platforms, devices, and delivery mechanisms (e.g., websites, mobile applications, and social media).

18F's Mission and Organization

18F was created in March 2014 by GSA with the mission of transforming the way the federal government[15] builds and buys digital services. Agencies across the federal government have access to 18F services. Work is largely initiated by agencies seeking assistance from 18F[16] and then the program decides how and if it will provide assistance. According to GSA, 18F seeks to accomplish its mission by providing a team of expert designers, developers, technologists, researchers, and product specialists to help rapidly deploy tools and online services that are reusable, less costly, and easier for people and businesses to use. In addition, 18F has several guiding principles, to include the use of open source development,[17] user-centered design, and agile software development.[18]

18F is an office within the Technology Transformation Service within GSA that was recently formed in May 2016.[19] 18F is led by the Deputy Commissioner for the Technology Transformation Service, who reports to the service's Commissioner. Prior to May 2016, 18F was located within the Office of Citizen Services and Innovative Technologies and reported to the Associate Administrator for Citizen Services and Innovative

[15]In February 2016, GSA announced the creation of the 18F State and Local Government Practice to assist federal agencies that provide grants to state and local programs According to GSA, it decided to expand its services after a pilot project with the State of California through HHS. As of May 2016, 18F has yet to engage in any other projects with state or local programs. Additionally, 18F officials stated that GSA was working with White House counsel to determine the extent to which 18F can receive payment directly from state and local governments. Once this decision has been made, 18F officials told us that they will determine the key responsibilities of its State and Local Government Practice.

[16]In March 2016, GSA created an office within 18F that is responsible for, among other things, marketing and sales to agency partners.

[17]Open source software is publicly available for use, study, reuse, modification, enhancement, and redistribution by the software's users.

[18]Agile development calls for the delivery of software in small, short increments rather than in the typically long, sequential phases of a traditional waterfall approach.

[19]The Technology Transformation Service was created in May 2016 and is intended to transform the way government builds, buys, and shares technology. It is responsible for, among other things, designing, building, and operating technology products and services for federal agencies consulting with federal agencies on technology and the recruitment of staff with related expertise; designing, building, and operating government-wide technology products and platforms; and educating federal agencies on modern technology design, development, operations, and procurement methodologies.

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Technologies. In March 2016 GSA created a new organizational structure for 18F that centers around five business units.[20]

- **Custom Partner Solutions.** Provides agencies with custom application solutions.

- **Products and Platforms.** Provides agencies with access to tools that address common government-wide needs.

- **Transformation Services.** Aims to improve how agencies acquire and manage IT by providing them with consulting services, to include new management models, modern software development practices, and hiring processes.

- **Acquisition Services.** Provides acquisition services and solutions to support digital service delivery, including access to vendors specializing in agile software development, and request for proposal development consultation.

- **Learn.** Provides agencies with education, workshops, outreach, and communication tools on developing and managing digital services.

To provide the products and services offered by each business unit, 18F relied on 173 staff to carry out its mission, as of March 2016. The staff are assigned to different projects that are managed by the business units.[21] According to 18F officials, the program used special hiring authorities for the vast majority of its staff: Schedule A excepted service authorities were used to hire 162 staff.[22] These authorities permit the appointment of qualified personnel without the use of a competitive examination process. GSA has appointed its staff to terms that are not to exceed 2 years. According to the Director of the 18F Talent division, after the initial appointment has ended, GSA has the option of appointing staff to an additional term not to exceed 2 years.

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[20]In March 2016 18F officials told us that the GSA order on 18F's organization would be updated to reflect this new structure by May 2016.

[21]Most staff are also assigned to one of five branches of 18F's Chapters division, engineering, products, experience design, change strategist, and acquisition specialists.

[22]For 33 of these staff members, GSA relied on authority provided by the Office of Personnel and Management to use Schedule A authority for digital services expert positions, 79 Fed. Reg. 44,474 (July, 31, 2014). Regarding the other 129 staff, GSA relied on authority provided to agencies by OPM in 5 C.F.R. § 213.3102(r).

GSA funds 18F through the Acquisition Services Fund—a revolving fund, which operates on the revenue generated from its business units rather than an appropriation received from Congress.[23] The Federal Acquisition Service is responsible for managing this fund and uses it to invest in the development of 18F products and services that will be used by other organizations.[24] 18F is to recover costs through the Acquisition Services Fund reimbursement authority for work related to acquisitions and the Economy Act reimbursement authority[25] for all other projects. According to the memorandum of agreement between 18F and the Federal Acquisition Service, 18F, like all programs funded by the Acquisition Services Fund, is required to have a plan to achieve full cost recovery.[26] In order to recover its costs, 18F is to establish interagency agreements with partner agencies and charges them for actual time and material costs, as well as a fixed overhead amount. Table 1 describes 18F's revenue, expenses, and net revenue for fiscal years 2014 and 2015. Table 2 describes 18F's projected revenue, expenses, and net revenue for fiscal years 2016 through 2019.

Table 1: Reported Revenue, Expenses, and Net Operating Results for 18F, Fiscal Years 2014 and 2015

Fiscal year	Revenue	Operating expenses	Net operating results
2014	$0[a]	$8,563,700	($8,649,450)
2015	$22,262,000	$31,760,000	($9,498,000)

Source: GSA documentation used as part of the financial statements for the Acquisition Services Fund. | GAO-16-733T

[a]According to 18F officials, although the program generated $1,388,887 million in revenue during fiscal year 2014, the Federal Acquisition Service, which administers the Acquisition Services fund, decided to account for this revenue in fiscal year 2015.

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[23]40 U.S.C. § 321.

[24]GSA reported that the Acquisition Services Fund had an unobligated balance of $2,074,000,000 at the end of fiscal year 2015.

[25]31 U.S.C. § 1535.

[26]GSA, *Memorandum of Agreement between the Federal Acquisition Service And Office of Citizen Services, Innovative Technologies, and 18F* (June 2, 2015).

Table 2: Projected Revenue, Expenses, and Net Operating Results for 18F, Fiscal Years 2016 through 2019

Fiscal year	Projected revenue	Projected operating expenses	Projected net operating results
2016	$33,518,000	$48,450,000	($14,932,000)
2017	$62,381,000	$74,764,000	($12,383,000)
2018	$91,872,000	$91,999,000	($127,000)
2019	$101,697,000	$100,552,000	$1,145,000

Source: 18F documentation. | GAO-16-733T

As shown in table 2, according to its projections, 18F plans to generate revenue that meets or exceeds operating expenses and cost of goods sold beginning in fiscal year 2019.

In May 2016, the GSA Inspector General reported on an information security weakness pertaining to 18F.[27] Specifically, according to the report, 18F misconfigured a messaging and collaboration application, which resulted in the potential exposure of personally identifiable information (PII).[28] 18F officials told us that, based on the preliminary results of their ongoing review, information such as individual's first names, last names, e-mail addresses, and phone numbers were made available on the messaging and collaboration platform's databases, which are managed by that application's vendor. Those officials also stated that based on the preliminary results of their ongoing review, more sensitive PII, such as Social Security numbers and protected health information, were not exposed. They added that they are continuing a detailed review, in coordination with the GSA IT organization, to confirm that more sensitive PII were not made available.

USDS's Mission and Organization

According to the Administration, in 2013 it initiated an effort that brought together a group of digital and technology experts from the private sector that helped fix Healthcare.gov. In an effort to apply similar resources to

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[27]GSA, Office of the Inspector General, Office of Inspections and Forensic Auditing, *Management Alert Report: GSA Data Breach*, JE16-004 (May 12, 2016).

[28]PII is any information that can be used to distinguish or trace an individual's identity—such as name, date, and place of birth, and Social Security number—or other types of personal information that can be linked to an individual—such as medical, educational, financial, and employment information.

additional projects, in August 2014 the Administration announced the launch of USDS,[29] to be led by an Administrator and Deputy Federal CIO who reports to the Federal CIO.[30] According to OMB, USDS's mission is to transform the most important digital services for citizens. USDS selects which projects it will apply resources to and generally initiates its effort with agencies.

To accomplish its mission, USDS aims to recruit private sector experts (e.g., IT engineers and designers) and partner them with government agencies. With the help of these experts, OMB states that USDS applies best practices in product design and engineering to improve the usefulness, user experience, and reliability of the most important public-facing federal digital services. As of November 2015, USDS staff totaled about 98 individuals. Similar to 18F, USDS assigns individuals directly to projects aimed at achieving its mission.[31]

USDS has used special hiring authorities for the vast majority of it staff. Specifically:

- **Schedule A excepted service.** According to USDS, as of November 2015, 52 USDS staff members were hired using the schedule A excepted service hiring authority.[32] According to the USDS Administrator, appointments made using this authority are not to exceed 2 years. At the end of that period, staff can be appointed for an additional term of no more than 2 years.

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[29]According to OMB, USDS is part of the implementation of the May 2012 strategy for digital government, *Digital Government: Building a 21rst Century Platform to Better Serve the American People.*

[30]The Federal CIO is the presidential designation for the Administrator of the OMB Office of E-Government.

[31]USDS also assigns staff to one of four communities of practice: Engineering, Design, StratOps, and Talent.

[32]Under its authority to except positions from competitive examination requirements, in June 2014, OPM approved OMB's request to use Schedule A authority for up to 34 digital service expert positions. 79 Fed. Reg. 44,474 (July 31, 2014). In December 2015, OPM approved OMB's request for to increase the number of positions that could be filled using this authority from 34 to 85.

- **Intermittent consultants.** According to USDS, as of November 2015, 39 USDS staff members were intermittent consultants—that is, individuals hired through a noncompetitive process to serve as consultants on an intermittent basis or without a regular tour of duty.[33] The USDS Administrator explained that some of these staff are eventually converted to temporary appointments under the Schedule A authority.

According to its Administrator, USDS does not generally make permanent appointments for its staff because it allows the program to continuously bring in new staff and ensure that its ideas are continually evolving.

USDS reported spending $318,778 during fiscal year 2014 and approximately $4.7 million during fiscal year 2015. For fiscal year 2016, USDS plans to spend approximately $14 million, and the President's fiscal year 2017 budget estimated obligations of $18 million for USDS.

Agency Digital Service Teams

In an effort to make improvements to critical IT services throughout the federal government, the Presidents' Budget for fiscal year 2016 proposed funding for the 24 Chief Financial Officers Act agencies,[34] as well as the National Archives and Records Administration, to establish digital services teams. USDS policy calls for these agencies to, among other things, hire or designate an executive for managing their digital services teams. According to USDS policy, the digital service team leader is to report directly to the head of the agency or the deputy.

Additionally, USDS has established a hiring pipeline for digital service experts—that is, a unified process managed by USDS for accepting and reviewing applications, performing initial interviews, and providing agencies with candidates for their digital service teams. According to

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[33]Pursuant to 5 U.S.C. § 3109, an agency may contract for an expert or consultant to fill an intermittent or temporary position if that agency is authorized by an appropriation or other statute. See also 5 C.F.R. Part 304.

[34]31 U.S.C. § 901(b). The 24 Chief Financial Officers Act 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 Aeronautics and Space Administration, National Science Foundation, U.S. Nuclear Regulatory Commission, Office of Personnel Management, Small Business Administration, Social Security Administration, and U.S. Agency for International Development.

OMB, before using this service, agencies must agree to a charter with the USDS Administrator.

Roles and Responsibilities for Overseeing IT Investments

Over the last three decades, several laws have been enacted to assist federal agencies in managing IT investments. For example, the Paperwork Reduction Act of 1995 requires that OMB develop and oversee policies, principles, standards, and guidelines for federal agency IT functions, including periodic evaluations of major information systems.[35] In addition, the Clinger-Cohen Act of 1996, among other things, requires agency heads to appoint CIOs and specifies many of their responsibilities.[36] With regard to IT management, CIOs are responsible for implementing and enforcing applicable government-wide and agency IT management principles, standards, and guidelines; assuming responsibility and accountability for IT investments; and monitoring the performance of IT programs and advising the agency head whether to continue, modify, or terminate such programs.[37]

Most recently, in December 2014, IT reform legislation (commonly referred to as Federal Information Technology Acquisition Reform Act or FITARA) was enacted, which required most major executive branch agencies to ensure that the CIO had a significant role in the decision process for IT budgeting, as well as the management, governance, and oversight processes related to IT.[38] The law also required that CIOs review and approve (1) all contracts for IT services prior to executing them and (2) the appointment of any other employee with the title of CIO, or who functions in the capacity of a CIO, for any component organization within the agency. OMB also released guidance in June 2015 that

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[35]44 U.S.C. § 3501-3521.

[36]40 U.S.C. § 11101-11318.

[37]40 U.S.C. § 11315.

[38]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).

reinforces the importance of agency CIOs and describes how agencies are to implement the law.[39]

OMB plays a key role in helping federal agencies address these laws and manage their investments by working with them to better plan, justify, and determine how much they need to spend on projects and how to manage approved projects. Within OMB, the Office of E-Government and Information Technology, headed by the Federal CIO, directs the policy and strategic planning of federal IT investments and is responsible for oversight of federal technology spending.

18F and USDS Provided a Variety of Development and Consulting Services Supporting Agency Technology Efforts and Agencies Were Generally Satisfied with the Programs

As part of our ongoing work, we determined that 18F and USDS have provided a variety of development and consulting services to agencies to support their technology efforts. Specifically, between March 2014 and August 2015,[40] 18F staff helped 18 agencies with 32 projects and generally provided six types of services to the agencies, the majority of which related to development work. In addition, between August 2014 and August 2015,[41] USDS provided assistance on 13 projects at 11 agencies and provided seven types of consulting services.

Further, agencies were generally satisfied with the services they received from 18F and USDS. Specifically, of the 26 18F survey respondents, 23 were very satisfied or moderately satisfied and 3 were moderately dissatisfied. For USDS, all 9 survey respondents were very satisfied or moderately satisfied.

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

[40]As discussed in more detail later in this statement, these projects were the subject of our customer satisfaction survey.

[41]As discussed in more detail later in this statement, these projects were the subject of our customer satisfaction survey.

| 18F Has Provided a Variety of Products and Services; the Majority of Projects Were Development Work | Between March 2014 and August 2015, GSA's 18F staff helped 18 agencies with 32 projects, and generally provided services relating to its five business units: Custom Partner Solutions, Products and Platforms, Transformation Services, Acquisition Services, and Learn. In addition, 18F also provided agency digital service team candidate qualification reviews in support of USDS. |

- **Custom Partner Solutions.** 18F helped 11 agencies with a total of 19 projects relating to developing custom software solutions. Out of the 19 projects, 12 were related to website design and development. For example, regarding GSA's Pulse project—a website that displays data about the extent to which federal websites are adopting best practices, such as hypertext transfer protocol over Secure Sockets Layer (SSL)/ Transport Layer Security (TLS) (HTTPS)[42]—18F designed, developed, and delivered the first iteration of Pulse within 6 weeks of the project kick-off.[43] According to the GSA office responsible for managing the project, the first iteration has led to positive outcomes for government-wide adoption of best practices; for example, between June 2015 and January 2016, the percentage of federal websites using https increased from 27 percent to 38 percent.

  As another example, officials from the Department of Education's college choice project stated that 18F helped develop the College Scorecard website, which the public can use to search among colleges to find schools that meet their needs (e.g., degrees offered, location, size, graduation rate, average salary after graduation).44 18F also helped two agencies, HHS and the Department of Defense, on two projects to develop application programming interfaces—sets of routines, protocols, and tools for building software applications that specify how software components should interact.

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[42]The HTTPS protocol is defined as hyper text transfer protocol—an application protocol that allows the transmitting and receiving of information across the Internet—over SSL/TLS. SSL/TLS provide socket-layer security, encrypting all communication over a particular session without altering it. Through SSL/TLS, HTTPS supports authentication, confidentiality, and integrity of data sent between the endpoints. The secure http protocol encrypts http and was developed to allow the authorization of users and secure transactions. In June 2015, OMB required agencies to generally use https for existing websites and services by December 31, 2016.

[43]https://pulse.cio.gov/.

[44]https://collegescorecard.ed.gov/.

- **Acquisition Services.** 18F helped seven agencies on seven projects relating to acquisition services consulting.[45] For example, 18F provided the Department of State's Bureau of International Information Programs with cloud computing services[46] offered under a GSA blanket purchase agreement (BPA)—specifically, cloud management services (e.g., developers, testing and quality assurance, cloud architect) and infrastructure-as-a-service.[47] According to the Department of State, the department was able to deploy its instance of the infrastructure service only 1 month after it executed an interagency agreement with 18F. According to Social Security Administration officials, 18F helped the agency to incorporate agile software development practices into their requests for proposals for their Disability Case Processing System.

- **Learn.** 18F provided services to four agencies on four projects regarding training, such as educating agency officials on agile software development.[48] For example, 18F conducted training workshops on agile software development techniques with the Social Security Administration and Small Business Administration. In addition, according to the Department of Labor's Wage and Hour Division officials, 18F conducted a 3-day workshop on IT modernization.

[45]Of the seven agencies and projects relating to acquisition services, three agencies and projects also received services relating to the Learn business unit. These three agencies and projects are the Department of Labor's Wage and Hour Division consulting project, the Social Security Administration's Disability Case Processing System project, and the Nuclear Regulatory Commission Master Data Management project.

[46]According to the National Institute of Standards and Technology, cloud computing is "a means for enabling on-demand access to shared and scalable pools of computing resources with the goal of minimizing management effort or service provider interaction."

[47]According to the National Institute of Standards and Technology, the infrastructure-as-a service model is used when an agency has the capability to provision processing, storage, networks, and other fundamental computing resources and run its own software, including operating systems and applications. The agency does not manage or control the underlying infrastructure but controls and configures operating systems, storage, deployed applications, and possibly, selected networking components (e.g., host firewalls).

[48]As previously mentioned, three of four projects are also related to Acquisition Services: the Department of Labor's Wage and Hour Division consulting project and the Social Security Administration's Disability Case Processing System project, and the Nuclear Regulatory Commission Master Data Management Program project.

- **Transformation Services.** 18F assisted two agencies on two projects to help acquire the people, processes, and technology needed to successfully deliver digital services. For example, 18F assisted the Environmental Protection Agency on an agency-wide technology transformation. According to an official within the office of the CIO, 18F assisted the agency with e-Manifest—a system used to track toxic waste shipments. The official noted that 18F provided user-centered design, agile coaching, prototype development services, and agile and modular acquisition services. Further, the official stated that 18F helped turn around the project and significantly decreased the time of delivery for e-Manifest.

- **Products and Platforms.** 18F helped two agencies on two projects related to developing software solutions that can potentially be reused at other federal agencies. For example, according to GSA officials responsible for managing GSA's Communicart project, 18F provided the agency with an e-mail-based tool for approving office supply purchases.

- **Agency digital service team candidate qualification review.** 18F worked with USDS to recruit and hire team members for agency digital service teams. According to 18F officials, it provided USDS with subject matter experts to review qualifications of candidates for agency digital service teams.

Of the 32 projects, 6 are associated with major IT investments.[49] Cumulatively, the federal government plans to spend $853 million on these investments in fiscal year 2016. Additionally, risk evaluations performed by CIOs that were obtained from the IT Dashboard[50] showed that three of these investments were rated as low or moderately low risk and three investments were rated medium risk. Table 3 describes the

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[49]According to OMB, "major IT investment" means a system or an acquisition requiring special management attention because it has significant importance to the mission or function of the government; significant program or policy implications; high executive visibility; high development, operating, or maintenance costs; an unusual funding mechanism; or is defined as major by the agency's capital planning and investment control process.

[50]The IT Dashboard is a website maintained by OMB that displays federal agencies' cost, schedule, and performance data for over 700 major federal IT investments at 26 federal agencies.

associated investments, including their primary functional areas,[51] planned fiscal year 2016 spending, and CIO rating as of May 2016.

Table 3: Major Investments on which 18F Provided Assistance

Investment name	Agency	Primary functional area	Investment's planned fiscal year 2016 spending	CIO assessment as of May 2016
Transportation Security Administration Information Technology Infrastructure Program	Department of Homeland Security	Provide and maintain IT infrastructure	$368,664,000	Moderately low risk
United States Citizenship and Immigration Services Transformation	Department of Homeland Security	Immigration and naturalization	$175,781,000	Medium risk
Benefits 21st Century Paperless Delivery of Veterans Benefits	Department of Veterans Affairs	Veteran benefits and services	$259,091,000	Moderately low risk
Office of Government Contracting and Business Development SBA One	Small Business Administration	Business and industry development	$5,383,000	Low risk
Disability Case Processing System	Social Security Administration	Social security benefits	$40,795,000	Medium risk
eManifest	Environmental Protection Agency	Environmental waste management	$3,241,000	Medium risk

Source: Information Technology Dashboard. | GAO-16-733T

18F is also developing products and services—including an agile delivery service blanket purchase agreement (BPA), cloud.gov, and a shared authentication platform:

- **Agile delivery service BPA.** 18F established this project in order to support its need for agile delivery services, including agile software development. In August and September 2015, GSA awarded BPAs to 17 vendors. The BPAs are for 5 years and allow GSA to place orders against them for up to 13 specific labor categories relating to agile software development (e.g., product manager, backend web developer, agile coach) at fixed unit prices.

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[51]According to OMB's annual budget guidance, agencies are required to map each IT investment to a functional category. These categorizations, known as a primary function, are intended to enable OMB and others to analyze investments with similar functions, as well as identify and analyze potentially duplicative investments across agencies.

The BPAs do not obligate any funds; rather, they enable participating vendors to compete for follow-on task orders from GSA. In cases where 18F determines that it should use the agile BPA to provide services to partner agencies, GSA anticipates that 18F will work with that agency to develop a request for quotations and the other documents needed for a competition with agile BPA vendors.

In March 2016 18F released its first request for quotations under the agile BPA for a task order relating to building a web-based dashboard that would describe the status of vendors in the certification process for FedRAMP—a government-wide program, managed by GSA, to provide joint authorizations and continuous security monitoring services for cloud computing services for all federal agencies. GSA anticipates that the time required to complete the process from releasing a request for quotations to task order issuance will typically take between 4 to 8 weeks.

The initial BPAs were established under the first of three anticipated award pools—all of which are part of the "alpha" component of the Agile BPA project. 18F officials stated that they planned to establish BPAs for the other two pools in June 2016. They also anticipate a future beta version of the project that could potentially allow federal agencies beyond 18F to issue task orders directly to vendors. Officials stated that they expect to have a plan for the next steps of the beta version of this project by December of 2017.

18F officials have also expressed interest in creating additional marketplaces, such as those relating to data management, developer productivity tools, cybersecurity, and health IT. As of March 2016, 18F did not have time frames for when it planned to develop these additional marketplaces.

- **Cloud.gov.** 18F also developed cloud.gov service, which is an open source platform-as-a-service[52] that agencies can use to manage and deploy applications. 18F initially built cloud.gov in order to enable the

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[52]The National Institute for Standards and Technology defines a platform as a service as a cloud computing solution wherein the service provider delivers and manages the underlying infrastructure (i.e., servers, software, storage, and network equipment), as well as the platform (i.e., operating system, and programming tools and services) on which the consumer can create applications using programming tools supported by the service provider. In the case of cloud.gov, 18F uses Amazon Web Services as the underlying infrastructure-as-a-service cloud platform (i.e., the basic computing infrastructure of servers, software, storage, and network equipment).

group to use applications it developed for partner agencies. In creating the service, 18F decided to offer the service to other agencies because, according to 18F officials, cloud.gov offers a developer-friendly, secure platform, with tools that agencies can use to accelerate the process of assessing information security controls and authorizing systems to operate. According to 18F, the goal of cloud.gov is to provide government developers and their contractor partners the ability to easily deploy systems to a cloud infrastructure with better efficiency, effectiveness, and security than current alternatives.

According to a roadmap for cloud.gov, 18F plans to receive full FedRAMP Joint Authorization Board approval for this service by August 2016. Once available, the group anticipates requiring agencies to pay for this service through an interagency agreement with 18F.

- **Shared authentication platform.** In May 2016, 18F announced that it was initiating an effort to create a platform for users who need to log into federal websites for government services. According to 18F, this system is designed to be each citizen's "one account" with the government and allow the public to verify an identity, log into government websites, and if necessary, recover an account. As of May 2016, 18F plans to conduct prototyping activities through September 2016 and did not have plans beyond that time frame.

In addition to developing future products and services, 18F created a variety of guides and standards for use internally as well by agency digital service teams. These guides address topics such as accessibility,[53] application programming interfaces,[54] and agile software development.[55]

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[53]https://pages.18f.gov/accessibility/.

[54]https://github.com/18f/api-standards.

[55]https://pages.18f.gov/agile/.

USDS Provided Seven Types of Consulting Services Aimed at Helping Agencies Improve IT

From August 2014 through August 2015, USDS provided assistance on 13 projects across 11 agencies. The group generally provided seven types of consulting services: quality assurance, problem identification and recommendations, website consultation, system stabilization, information security assessment, software engineering, and data management.

- **Quality assurance.** Three of the 13 projects related to providing quality assurance services. For example, regarding the Social Security Administration's Disability Case Processing System, USDS reviewed the quality of the software and made recommendations that, according to the agency, resulted in costs savings. Additionally, for the Departments of Veterans Affairs and Defense Service Treatment Record project, USDS provided engineers who identified and resolved errors in the process of exchanging records between the two departments, according to the Department of Veterans Affairs. Further, for the HHS Healthcare.gov system, the group performed services aimed at optimizing the reliability of the system, according to HHS.

- **Problem identification and recommendations.** USDS identified problems and made recommendations for three projects. For all three projects, it performed a discovery sprint—a quick (typically 2 week) review of an agency's challenges, which is to culminate in a clear understanding of the problems and recommendations for how to address the issues. For example, it performed a discovery sprint for the Department of the Treasury Internal Revenue Service that focused on three areas: authentication of taxpayers, modernizing systems through event-driven architecture,[56] and redesigning the agency's website. USDS delivered a report to the Internal Revenue Service with recommendations and also suggested that work initially focus on taxpayer authentication. Consistent with these recommendations, the group and the agency decided to initially focus on authentication, to include re-opening of the online application GetTranscript.[57]

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[56]Event-driven architecture is a software architecture framework that promotes the production, detection, consumption of, and reaction to events.

[57]Get Transcript application allowed taxpayers to obtain a viewable and printable transcript on the agency's website. The application was taken offline on May 21, 2015, because of significant security problems.

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For the Department of Justice Federal Bureau of Investigation's National Incident Based Reporting System, according to USDS, the program performed a discovery sprint and made several recommendations for accelerating deployment of the system.

- **Website consultation.** USDS provided consultation services for three agency website projects. For example, for the Office of the U.S. Trade Representative's Trans-Pacific Partnership Trade Agreements website, USDS provided website design advice and confirmed that the agency had the necessary scalability to support the number of anticipated visitors.[58] Additionally, it consulted with the Office of Personnel and Management (OPM) on the design, implementation, and development of a website for providing information on reported data breaches.[59]

- **System stabilization.** For the Department of State's Consular Consolidated Database,[60] according to USDS, it helped stabilize the system and return it to operational service after a multi-week outage in June 2015.

- **Information security assessment.** USDS helped with an information security assessment regarding Electronic Questionnaires for Investigations Processing, which encompasses the electronic applications used to process federal background check investigations.

- **Software engineering.** For the Department of Homeland Security U.S. Citizenship and Immigration Services Transformation project,[61] USDS's software engineering advisors provided guidance on private sector best practices in delivering modern digital services. According to the department, the group's work has supported accomplishments such as increasing the frequency of software releases and improving adoption of agile development best practices.

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[58]https://ustr.gov/tpp/.

[59]https://www.opm.gov/cybersecurity.

[60]The Consular Consolidated Database is used to, among other things, assist consular officers review and complete visa adjudications.

[61]U.S. Citizenship and Immigration Services processes millions of applications for persons seeking to study, work, visit, or live in the United States. The agency has been working since 2005 to transform its outdated systems into an account-based system with electronic adjudication and case management tools that will allow applicants to apply and track the progress of their application online.

- **Data management.** For the Department of Homeland Security Office of Immigration Statistics, USDS helped to develop monthly reports on immigration enforcement priority statistics. According to the department, USDS supported the development of processes for obtaining data from other offices within the department and generating the monthly reports. According to the department, after 7 weeks of working with USDS, it was able to develop a proof of concept that reduced the report generating process from a month to 1 day.

Seven of the 13 projects are associated with major IT investments. Cumulatively, the federal government plans to spend over $1.24 billion on these investments in fiscal year 2016. Three investments were rated by their CIOs as low or moderately low risk and four investments were rated as being medium risk. Table 4 describes the associated investments, including their primary functional areas planned fiscal year 2016 spending, and CIO rating as of May 2016.

Table 4: Major Investments on which U.S. Digital Service Provided Assistance

Investment name	Agency	Primary functional area	Investment's planned fiscal year 2016 spending	CIO assessment as of May 2016
Defense Travel System	Department of Defense	Customer services	$37,900,000	Low risk
Centers for Medicare and Medicaid Services Federally Facilitated Marketplace	Department of Health and Human Services	Access to care	$365,236,000	Moderately low risk
U.S. Citizenship and Immigration Services Transformation	Department of Homeland Security	Immigration and naturalization	$175,781,000	Medium risk
Enterprise Infrastructure and Operations	Department of State	Border and transportation security	$329,893,000	Medium risk
Benefits 21st Century Paperless Delivery of Veterans Benefits	Department of Veterans Affairs	Veteran benefits and services	$259,091,000	Moderately low risk
Federal Investigative Services Systems Transformation	Office of Personnel Management	Credential issuance and management	$38,228,040	Medium risk
Disability Case Processing System	Social Security Administration	Social security benefits	$40,795,000	Medium risk

Source: Information Technology Dashboard. | GAO-16-733T

In addition to helping agencies improve IT services, USDS has developed guidance for agencies. For example, it developed the Digital Services Playbook to provide government-wide recommendations on practices for

building digital services.[62] The group also created the TechFAR Handbook to explain how agencies can use the Digital Services Playbook in ways that are consistent with the Federal Acquisition Regulation.[63] Further, USDS, in collaboration with 18F, developed the draft version of U.S. Web Design Standards, which includes a visual style guide and a collection of common user interface components.[64] With this guide, USDS aims to improve government website consistency and accessibility.

In addition to developing guidance, USDS, in collaboration with OMB's Office of Federal Procurement Policy, used challenge.gov[65] to incentivize the public to create a digital service training program for federal contract professionals. The challenge winner received $250,000 to develop and pilot a training program. Additionally, the Deputy Administrator for USDS stated that 30 federal contract professionals from more than 10 agencies completed this pilot program in March 2016. According to OMB, the program is being revised and transitioned to the Federal Acquisition Institute, where it will be included as part of a certification for digital service contracting officers.

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[62]https://playbook.cio.gov/.

[63]https://playbook.cio.gov/techfar/.

[64]https://playbook.cio.gov/designstandards/getting-started/.

[65]https://www.challenge.gov. This website is a listing of challenge and prize competitions, all of which are run by more than 80 agencies across federal government. These include technical, scientific, ideation, and creative competitions where the U.S. government seeks innovative solutions from the public.

A Majority of Surveyed Agency Project Managers Were Satisfied with Services Provided by 18F and USDS

In response to a satisfaction survey we administered to agency managers of selected 18F and USDS projects,[66] a majority of managers were satisfied with the services they received from the groups.[67] Specifically, the average score for services provided by 18F was 4.38 (on a 5-point satisfaction scale, where 1 is very dissatisfied and 5 is very satisfied) and the average score for the services provided by USDS was 4.67.[68] Table 5 describes the survey results for 18F and USDS.

Table 5: Results of GAO Survey on Satisfaction with Services Provided by 18F and U.S. Digital Service to Agency Projects

Program	Very satisfied	Moderately satisfied	Neither satisfied nor dissatisfied	Moderately dissatisfied	No response to survey
18F	16	7	0	3	5[a]
USDS	6	3	0	0	4[b]

Source: GAO survey of agency project managers that engaged with 18F and USDS. | GAO-16-733T

[a]This includes one project manager who responded to the survey but selected the "no response" survey option.

[b]This includes one project manager who responded to the survey but did not answer the question regarding satisfaction with USDS services.

In addition to providing scores, the survey respondents also provided written comments. Regarding 18F, five factors were cited by two or more respondents as contributing to their satisfaction with the services the program provided: delivering quality products and services, providing good customer service, completing tasks in a timely manner, employing staff with valuable knowledge and skills, and providing valuable education to agencies. For example, one respondent stated that 18F has an expert staff that helped the team understand agile software development and incorporate user-centered design into the agency's development process.

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[66]As previously mentioned, we selected 32 18F projects and 13 USDS projects.

[67]We received a response rate of 82 percent—84 percent for projects that obtained assistance from 18F and 77 percent for projects with assistance from USDS.

[68]Specifically, we asked survey respondents to rate their organization's satisfaction using the following scale: 5 is "very satisfied," 4 is "moderately satisfied," 3 is "neither satisfied nor dissatisfied," 2 is "moderately dissatisfied," and 1 is "very dissatisfied."

With respect to USDS, four factors were cited by two or more respondents as contributing to their satisfaction with its services: delivering quality services, providing good customer service, completing tasks in a timely manner, and employing staff with valuable knowledge and skills. For instance, one respondent stated that USDS responded to the agency's request in a matter of hours, quickly developed an understanding of the agency's IT system, and pushed to improve the system, even in areas beyond the scope of USDS's responsibility.

Although the majority of agencies were satisfied, a minority of respondents provided written comments describing their dissatisfaction with services provided by 18F. For example, six respondents cited poor customer service, four respondents cited higher than expected costs, and one respondent stated that 18F's use of open source code may not meet the agency's information security requirements.

In a written response to these comments, 18F stated that it has received a variety of feedback from its partners and had modified and updated its processes continuously over the past 2 years. For example, with respect to higher than expected costs, 18F stated that project costs sometimes needed to be adjusted mid-project to address, among other things, higher than expected infrastructure usage or unexpected delays. To address this issue, 18F stated that it uses the assistance of subject matter experts to estimate project costs, and wrote a guide to assist with, among other things, better managing the budgets of ongoing projects. Regarding 18F's use of open source code, it stated that it has worked with its partners to discuss the use of open source software and information security practices.

USDS and 18F Did Not Fully Measure Performance and Prioritize Projects

To assess actual results, prioritize limited resources, and ensure that the most critical projects receive attention, entities that provide IT services, such as USDS and 18F, should establish and implement the following key practices.

- **Define outcome-oriented goals and measure performance.** Our previous work and federal law stress the importance of focusing on outcome-oriented goals and performance measures to assess the actual results, effects, or impact of a program or activity compared to

its intended purpose.[69] Goals should be used to elaborate on a program's mission statement and should be aligned with performance measures. In turn, performance measures should be tied to program goals and demonstrate the degree to which the desired results were achieved. To do so, performance measures should have targets to help assess whether goals were achieved by comparing projected performance and actual results. Finally, goals and performance measures should be outcome-oriented—that is, they should address the results of products and services.

- **Establish and implement procedures for prioritizing IT projects.** We have reported that establishing and implementing procedures, to include criteria, for prioritizing projects can help organizations consistently select projects based on their contributions to the strategic goals of the organization.[70] Doing so will better position agencies to effectively prioritize projects and use the best mix of limited resources to move toward its goals.

18F Has Goals and Procedures for Prioritizing Projects, but Needs to Fully Define Outcome-Oriented Goals and Measure Performance

In our draft report, we determined that 18F has developed several outcome-orientated goals, performance measures, and procedures for prioritizing projects, which it has largely implemented. However, not all of its goals are outcome-oriented and it has not yet measured program performance.

Define Outcome-Oriented Goals and Measure Performance

At the conclusion of our review in May 2016, 18F provided 5 goals and 17 associated performance measures that the organization aims to achieve by September 2016 (see table 6).

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[69]5 U.S.C. § 306, 31 U.S.C. §§ 1115-1116 & 1120-1124; GAO, *Executive Guide: Effectively Implementing the Government Performance and Results Act,* GAO/GGD-96-118 (Washington, D.C.: June 1, 1996); and GAO, *Designing Evaluations: 2012 Revision,* GAO-12-208G (Washington, D.C.: Jan. 31, 2012).

[70]GAO, *Information Technology Investment Management: A Framework for Assessing and Improving Process Maturity (Supersedes AIMD-10.1.23),* GAO-04-394G (Washington, D.C.: March 2004).

Table 6: 18F Goals and Performance Measures

Goal	Performance measures
Continuously improve how 18F works	• Establish and track success metrics and goals for each team. Develop cadence and metrics for demonstrating performance against performance measures at org- management- and unit level. • Establish and track success metrics and goals for every engagement. • Establish metrics and goals for improving 18F's capacity management. • Establish metrics and goals for improving 18F's internal information flow. • Replace 18F's hourly pricing with weekly, biweekly, and/or other less granular pricing approaches.
Grow 18F to 215 staff while sustaining a healthy 18F culture	• Onboard 47 new hires. • Establish retention goals for current 18F staff and meet or exceed the baseline. • Establish metrics for employee satisfaction and meet or improve current baseline.
Demonstrate that 18F has saved at least $250 million in government digital spending while achieving 90 percent customer satisfaction	• Estimate the "but-for" cost of every past and current 18F project. • Between completed Custom Partner Solutions and Acquisitions projects, demonstrate $200 million in past savings versus "but-for" costs. • Deliver on Custom Partner Solutions and Acquisition projects in April 2016 through September 2016 that together save another estimated $50 million. • Develop and implement a partner satisfaction metric to be measured continuously during and upon completion of all engagements. • Design and implement procedures to address partner dissatisfaction.
Deliver two different government-wide platform services to 10 different agency partners	• Deliver cloud.gov services to 10 agency partners. • Deliver a prototype of the shared authentication platform with two participating agency partners.
Sign and begin two Transformation Services engagements	• Sign interagency agreements with two agencies to engage with the Transformation Service, with agreement to all client prerequisites and establishment of success metrics and goals. • Kick off both engagements per plan.

Source: 18F documentation. | GAO-16-733T

To 18F's credit, several of its goals and performance measures appear to be outcome-oriented. For example, the goal of delivering two government-wide platform services and the associated performance measures are outcome-oriented in that they address results—that is, delivering services to partner agencies.

However, not all of the goals and performance measures appear to be outcome-oriented. For example, the goal of growing 18F to 215 staff while sustaining a healthy culture and its associated measure of hiring 47 staff do not focus on results of products or services. Further, not all of the performance measures have targets. For example, seven of the performance measures state that 18F will establish performance indicators, but 18F has yet to do so. Moreover, 18F does not have goals

and associated measures that describe how it plans to achieve its mission after September 2016.

In addition, although 18F is required to have a plan to achieve full cost recovery, it has yet to recover costs and its projections for when this will occur have slipped over time. Specifically, in June 2015, 18F projected that it would fully recover its costs for an entire fiscal year beginning in 2016; however, in May 2016, 18F provided revised projections indicating that it would recover costs beginning in fiscal year 2019. Those projections also indicated that, in the worst case, it would not do so through 2022, the final year of its projections. Establishing performance measures and targets that are tied to achieving full cost recovery would help management gauge whether the program is on track to meet its projections. However, 18F has not established such performance measures and targets.

Finally, 18F has yet to fully assess the actual results of its activities. Specifically, the group has not assessed its performance in accordance with the 17 performance measures it developed. 18F's then-parent organization assessed its own performance quarterly beginning in the 4th quarter of fiscal year 2015, including for measures that 18F was responsible for. However, this review process did not include or make reference to the 17 measures developed to gauge 18F's performance, and thus do not provide insight into how well it is achieving its own mission.

In a written response, GSA stated that 18F performance is measured as part of the Technology Transformation Service's goals and measures and that these goals and measures should form the basis for our review. However, the Technology Transformation Service's goals and measures do not describe how GSA aims to achieve the specific mission of 18F.

Until it establishes goals and performance measures beyond September 2016, ensures that all of its goals and performance measures are outcome-oriented, and that its performance measures have targets, 18F will not have clear definition of what it wants to accomplish. Additionally, without developing performance measures and targets tied to achieving full cost recovery, GSA will lack a fully defined approach to begin recovering all costs in fiscal year 2019. Further, until 18F fully measures actual results, it will not be positioned to assess the status of its activities and determine the areas that need improvement.

Establish and Implement Procedures for Prioritizing IT Projects

18F has developed procedures, including criteria, for prioritizing projects and largely implemented its procedures. Specifically, according to the Director of Business Strategy, potential projects are discussed during weekly intake meetings. As part of these meetings, 18F discusses project decision documents, which outline the business, technical and design elements, as well as the schedule, scope, and resources needed to fulfill the client's needs. Using these documents, 18F determines whether proposed projects meet, among other things, the following criteria: (1) the project is aligned with the products and services offered by 18F, (2) it can be completed in a time frame that meets the agency's needs and at a cost that fits the agency's budget, and (3) the project's government transformation potential (e.g., impact on the public, cost savings). These documents are used by the business unit leads to make a final decision about whether to accept the projects.

18F has largely implemented its procedures. To its credit, with respect to the 14 projects that 18F selected since establishing its prioritization and selection process,[71] 18F developed a decision document for 12 of the 14 projects. However, 18F did not develop a decision document for the 2 remaining projects—the Nuclear Regulatory Commission Master Data Management project and GSA's labs.usa.gov project.

With respect to the Nuclear Regulatory Commission Master Data Management project, 18F officials explained that this project only required staff from one division; as such, that division was able to independently prioritize and select this project. Additionally, regarding the GSA labs.usa.gov project, 18F officials said the Associate Administrator for Office of Citizen Services and Innovative Technologies directed 18F to provide assistance.

If 18F consistently follows its process for prioritizing projects, it will be better positioned to apply resources to IT projects with the greatest need of improvement.

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[71]18F established its process for prioritizing projects in March 2015.

| USDS Has Goals and a Process for Prioritizing Projects, but More Work Remains to Define Outcome-Oriented Goals, Measure Performance, and Implement Its Process for Prioritization | As part of our ongoing work, we determined that while USDS has developed a process for prioritizing projects and program goals, it has not fully implemented important program management practices. |

Define Outcome-Oriented Goals and Measure Performance

In response to our inquiry, in November 2015 USDS developed four goals to be achieved by December 2017: (1) recruit and place over 200 digital service experts in strategic roles at agencies and cultivate a continually growing pipeline of quality technical talent through USDS,[72] (2) measurably improve five to eight of the government's most important services, (3) begin the implementation of at least one outstanding common platform, and (4) increase the quality and quantity of technical vendors working with government and cultivate better buyers within government. Additionally, USDS established a performance measure with a target for one of its goals. Specifically, it has a measure for its first goal as it plans to measure the extent to which it will hire 200 digital service experts by December 2017.

To its credit, several of the goals appear to be outcome-oriented. For example, improving five to eight services is outcome-oriented in that it addresses results. However, USDS has not established performance measures or targets for its other goals. In addition, the program's first goal—recruit and place over 200 digital service experts in strategic roles at agencies and cultivate a continually growing pipeline of quality technical talent through USDS—does not appear to be outcome-oriented. Further, USDS has only measured actual results for one of its goals. Specifically, for the goal of placing digital service experts at agencies, as of May 2016, USDS officials stated that they had 152 digital service experts. However, USDS has not measured actual results for the other three goals.

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[72]At the conclusion of our review in May 2016, the USDS Administrator stated that the group amended its original goal of placing 500 digital service experts at agencies to 200. The Administrator explained that the goal as originally written reflected staff from 18F and the Presidential Innovation Fellows, which are outside the scope of USDS. That official added that goal of placing 200 digital service experts addresses OMB resources as well as staff at agency digital service teams.

USDS officials provided examples of how they informally measure performance for the other three goals. For example, for the goal of measurably improving five to eight of the government's most important services, the USDS Administrator stated that approximately 1 million visitors viewed the Department of Education's College Scorecard website in the initial days after it was deployed.

However, USDS has not documented these measures or the associated results to date. Until USDS ensures that all of its goals are outcome-oriented and establishes performance measures and targets for each goal, it will be difficult to hold the program accountable for results. Additionally, without an assessment of actual results, it is unclear what impact USDS's actions are having relative to its mission and whether investments in agency digital service teams are justified.

Establish and Implement Procedures for Prioritizing Projects

USDS has developed procedures and criteria for prioritizing projects. To identify projects to be considered, USDS is to use, among other sources, a June 2015 OMB report to Congress that identifies the 10 highest-priority federal IT projects in development.[73] To prioritize projects USDS has the following three criteria, which are listed in their order of importance (1) What will do the greatest good for the greatest number of people in the greatest need? (2) How cost-efficient will the USDS investment be? and (3) What potential exists to use or reuse a technological solution across the government? Using these criteria, USDS intends to create a list of all potential projects, to include their descriptions and information on resources needs. This list is to be used by USDS leadership to make decisions about which projects to pursue.

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[73]The explanatory statement for the Consolidated and Further Continuing Appropriations Act, 2015, directed the Executive Office of the President to identify the 10 highest priority IT investment projects that are under development across federal agencies and report quarterly to Congressional committees on the status of these projects. 160 Cong. Rec. H9736 (daily ed. Dec. 11, 2014). The explanatory statement for the Consolidated Appropriations Act, 2016, includes a similar requirement; in particular, the statement calls for USDS to provide quarterly reports to Congress describing the status of current USDS teams and projects including the top 10 high priority programs, a list of USDS accomplishments, and agency project proposals. 161 Cong. Rec. H10137 (daily ed. Dec. 17, 2015).

To its credit, USDS created a list of all potential, ongoing, and completed projects, which included project descriptions and resource needs. Additionally, USDS has engaged with 6 of the 10 priority IT projects identified in the June 2015 report,[74] including the Department of Health and Human Services' healthcare.gov project and the Department of Homeland Security's U.S. Citizenship and Immigration Services Transformation. Additionally, according to a USDS staff member, USDS considered the remaining 4 projects and decided not to engage with them to date.

However, USDS has yet to develop a quarterly report on the 10 high priority programs, which it was directed by Congress to develop. Specifically, in December 2015, Congress modified its direction for the Executive Office of the President to develop the reports regarding the top 10 high priority programs and specifically called for USDS to do so on a quarterly basis.

According to a USDS staff member, a second top 10 high priority investment report has been drafted and will be finalized prior to the issuance of our report. However, the second top 10 report will address the former congressional direction for the Executive Office of the President to develop reports and OMB did not have a time frame for when USDS would begin to develop reports that address the modified congressional direction. Until USDS develops a time frame for the report on the top 10 programs, develops the report within that time frame and on a quarterly basis thereafter, and considers the programs identified in these reports as part of its prioritization process, USDS has less

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[74]The 10 projects identified in this report are Department of Commerce's Census 2020, Department of Defense's Healthcare Management System Modernization, Department of Education's Federal Student Aid Systems, Department of Health and Human Services' healthcare.gov, Department of Homeland Security's U.S. Citizenship and Immigration Services Transformation, Department of State's Consular Systems Modernization, Department of Veterans Affairs' Electronic Health Records Veterans Health Information Systems and Technology Architecture, Department of Veterans Affairs' Medical Appointment Scheduling System, Department of Veterans Affairs Veterans' Benefits Management System, and Social Security Administration's Service Modernization. The OMB Office of E-Government and Information Technology and USDS developed criteria to identify these programs, including (1) broad public impact, (2) criticality to agency mission, (3) large scale and/or cost, (4) national security or health and safety impact, (5) challenging past performance, (6) congressional interest, and (7) current or anticipated USDS engagement.

assurance that it will apply resources to the IT projects with the greatest need of improvement.

Agencies Have Begun to Establish Digital Service Teams, but OMB Has Not Taken Steps to Ensure CIO Coordination

To help agencies effectively deliver digital services, the President's Budget for fiscal year 2016 proposed funding for digital service teams at 25 agencies—the 24 Chief Financial Officers Act agencies, as well as the National Archives and Records Administration. According to USDS policy, agencies are to, among other things, hire or designate an executive for managing their digital services teams. In addition, USDS has called for the deputy head of these agencies (or equivalent) to, among other things, agree to a charter with the USDS Administrator.[75] After agreeing to a charter, according to USDS, agencies can use USDS's hiring pipeline for digital service experts.

Of the 25 agencies that requested funding to establish teams, OMB has established charters with 6 agencies for their digital service teams—the Departments of Defense, Health and Human Services, Homeland Security, the Treasury, State, and Veterans Affairs. The charters establish the executives for managing digital service teams and describe the reporting relationships between the team leaders and agency leadership.

In addition, according to the Deputy USDS Administrator, USDS plans to establish charters with an additional 3 agencies by the end of the fiscal year—the Department of Education, the Social Security Administration, and Small Business Administration. For the remaining 16 agencies, as of April 2016, 8 agencies reported that they plan to establish digital service teams but have yet to establish charters with USDS—the Department of Housing and Urban Development, Environmental Protection Agency, General Services Administration, National Aeronautics and Space Administration, National Archives and Records Administration, National Science Foundation, Nuclear Regulatory Commission, and Office of Personnel Management. The other 8 agencies reported that they do not plan to establish digital service teams by September 2016 because they did not receive requested funding—the Departments of Agriculture, Commerce, Energy, the Interior, Justice, Labor, and Transportation; and

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[75]OMB, USDS Franchise Agreement (Nov. 2015).

the U.S. Agency for International Development. Table 7 summarizes agency and OMB efforts to establish digital service teams.

Table 7: Summary of Agency and the Office of Management and Budget Efforts to Establish Agency Digital Service Teams, as of April 2016

Established charter for digital service team with OMB	Agencies with which OMB plans to establish a charter by September 2016	Agencies for which OMB has yet to establish charters	Agencies that do not plan to establish a team by September 2016
• Department of Defense • Department of Health and Human Services • Department of Homeland Security • Department of State • Department of Veterans Affairs • Department of the Treasury	• Department of Education • Small Business Administration • Social Security Administration	• Department of Housing and Urban Development • Environmental Protection Agency • General Services Administration • National Aeronautics and Space Administration • National Archives and Records Administration • National Science Foundation • Nuclear Regulatory Commission • Office of Personnel Management	• Department of Agriculture • Department of Commerce • Department of Energy • Department of the Interior • Department of Justice • Department of Labor • Department of Transportation • U.S. Agency for International Development

Source: GAO analysis of responses from agency officials. | GAO-16-733T

OMB Did Not Ensure That Agencies Defined the Relationship between the Digital Services Team and CIOs

Congress has recognized the importance of having a strong agency CIO. In 1996, the Clinger-Cohen Act established the position of agency CIO and, among other things, gave these officials responsibility for IT investments, including IT acquisitions, monitoring the performance of IT programs, and advising the agency head whether to continue, modify, or terminate such programs. More recently, in December 2014, FITARA was enacted into law. It required most major executive branch agencies to ensure that the CIO has a significant role in the decision process for IT budgeting, as well as the management, governance, and oversight processes related to IT. The law also required that CIOs review and approve (1) all contracts for IT services associated with major IT investments prior to executing them and (2) the appointment of CIOs for any component within the agency. OMB also released guidance in June

2015 that reinforces the importance of agency CIOs and describes how agencies are to implement FITARA.[76] Further, according to our prior work, leading organizations clearly define responsibilities and authorities governing the relationships between the CIO and other agency components that use IT.[77]

Only one of the four agencies we selected for review—the Department of Homeland Security—defined the relationship between the executive for managing the digital services team and the agency CIO. Specifically, the Department of Homeland Security established a charter for its digital services team, signed by both the Administrator of USDS and the Deputy Secretary, which outlines the reporting structure and authorities for the digital services executive, including the relationship with the CIO. For example, according to the charter, the digital services executive will report on a day-to-day basis to the CIO, but will also report directly to the Deputy Secretary.

However, the other three agencies we reviewed—the Departments of Defense, State, and Veterans Affairs—have not defined the role of agency CIOs with regard to these teams. Although they have established charters for these teams, which describe the reporting structure between the digital services executive and senior agency leadership,[78] the charters do not describe the role of the agencies' CIOs and they have not documented this information elsewhere.

The Department of Defense CIO and the Department of Veterans Affairs Principal Deputy Assistant Secretary for the Office of Information and Technology told us that they work closely with their agency digital service team. However, while these officials have coordinated with the agency

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

[77]GAO, *Federal Chief Information Officers: Opportunities Exist to Improve Role in Information Technology Management*, GAO-11-364 (Washington, D.C.: Sept. 15, 2011); and *Library of Congress: Strong Leadership Needed to Address Serious Information Technology Management Weaknesses*, GAO-15-315 (Washington, D.C.: Mar. 31, 2015).

[78]The Director of the Defense Digital Service team is to report to the Chief of Staff, the head of the State Digital Service team is to report to the Deputy Secretary for Management and Resources, and the Veterans Affairs Digital Service Executive is to report to the Deputy Secretary.

digital service teams, the roles and responsibilities governing these relationships should be described to ensure that CIOs can carry out their statutory responsibilities.

In contrast to the Departments of Defense and Veterans Affairs, the State CIO told us that he has had limited involvement in the department's digital services team.[79] He added that he believes it will be important for CIOs to be involved in agency digital services teams in order to sustain their efforts.

In written comments, OMB acknowledged that the Department of State's charter does not describe the role of the CIO, but stated that the Departments of Defense and Veterans Affairs digital service team charters at least partially address the relationship between digital service teams and agency CIOs. Specifically, with respect to the Department of Defense, OMB stated that the charter calls for senior leadership, including the department's CIO, to ensure that digital service team projects proceed without delay.[80] Additionally, according to OMB, the charter for the Veterans Affairs digital service team calls for the team to be located in and supported by VA's CIO organization. However, these requirements do not address the specific responsibilities or authorities of the Veterans Affairs' CIO with regard to the digital service team.

The lack of defined relationships is due, in large part, to the fact that USDS policy on digital service teams does not describe the expected relationship between agency CIOs and these teams. As previously mentioned, USDS policy calls for the digital service team leader to report directly to the head of the agency or its deputy; however, it does not describe the expected responsibilities and authorities governing the relationship of the CIO.

Until OMB updates the USDS policy to clearly define the responsibilities and authorities governing the relationships between CIOs and digital

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[79]According to the Department of State CIO, he has attended meetings pertaining to information security with the digital services team.

[80]Our analysis did not find this statement in the Department of Defense charter. Instead, our analysis identified this requirement in a January 2015 memorandum regarding the Defense Digital Service from the Secretary of Defense to the Secretaries of the Military Departments.

services teams and ensures that existing agency digital service team charters or other documentation reflect this policy, agency CIOs may not be effectively involved in the digital service teams. This is inconsistent with long-standing law, as well as the recently enacted FITARA, and OMB's guidance on CIO responsibilities, and may hinder the ability for CIOs to carry out their responsibilities for IT management of the projects undertaken by the digital service teams.

In summary, by hiring technology and software development experts and using leading software development practices, both 18F and USDS have provided a variety of useful services to federal agencies. Most surveyed agency project managers that partnered with 18F and USDS were satisfied with the services provided.

It is important for USDS and 18F to establish outcome-oriented goals, measure performance, and prioritize projects, particularly since these are valuable management tools that could aid in the transfer of knowledge when critical temporary staff leave these organizations and are replaced. To their credit, both 18F and USDS have developed several outcome-orientated goals and procedures for prioritizing projects. However, the goals and associated performance measures and targets were not always outcome-oriented. Additionally, they have not fully measured program performance. As a result, it will be difficult to hold the programs accountable for results. Moreover, without documented measures and results for USDS, it is unclear whether investments in agency digital service teams are justified. Further, by delaying the date for when it projects to fully recover its costs and not having associated performance measures, 18F is at risk of not having the information necessary for GSA leadership to determine whether to continue using the Acquisition Services Fund for 18F operations. Finally, USDS has yet to develop a quarterly report on the 10 high priority programs, meaning that it may be applying resources to investments that are not in the most need of their assistance.

Although OMB has called for agencies to establish digital service teams, USDS policy does not require agencies to define the expected responsibilities and authorities governing the relationships between CIOs and digital service teams. To fulfill their statutory responsibilities, including as most recently enacted in FITARA and reinforced in OMB guidance, and ensure that CIOs have a significant role in the decision making process for projects undertaken by the digital service teams, such defined relationships are essential.

Accordingly, our draft report contains two planned recommendations to GSA and four to OMB. Specifically, the report recommends that GSA:

- ensure that goals and associated performance measures are outcome-oriented and that performance measures have targets, including

  - performance measures and targets tied to fully recovering program costs; and

  - goals, performance measures, and targets for how the program will achieve its mission after September 2016; and

- assess actual results for each performance measure.

The draft report also includes recommendations for OMB to:

- ensure that all goals and associated performance measures are outcome-oriented and that performance measures have targets;

- assess actual results for each performance measure;

- establish a time frame for developing the report identifying the highest priority projects, develop the report within that established time frame and on a quarterly basis thereafter, and consider the highest priority IT projects as part of the established process for prioritizing projects; and

- update USDS policy to clearly define the responsibilities and authorities governing the relationships between CIOs and the digital services teams and require existing agency digital service teams to address this policy. In doing so, the Federal Chief Information Officer should ensure that this policy is aligned with relevant federal law and OMB guidance on CIO responsibilities and authorities.

If GSA implements our recommendations, it will be better positioned to effectively measure performance. Additionally, OMB's implementation of our recommendations will position it to effectively measure performance, prioritize USDS resources, and ensure that CIOs play an integral role in agency digital service teams.

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

GAO Contact and Staff Acknowledgments

If you have any questions on matters discussed in this testimony, please contact David A. Powner at (202) 512-9286 or at pownerd@gao.gov. Other key contributors include Nick Marinos (Assistant Director), Kavita Daitnarayan, Rebecca Eyler, Kaelin Kuhn, Jamelyn Payan, and Tina Torabi.

Mr. HURD. Thank you, Mr. Powner.

Mr. Hodgkins, you are recognized for 5 minutes.

STATEMENT OF A.R. "TREY" HODGKINS

Mr. HODGKINS. Good morning.

Chairmen Hurd and Meadows, Ranking Members Kelly and Connolly, and members of the committee, thank you for the opportunity to share our perspectives regarding the U.S. Digital Service and the General Services Administration's 18F and their efforts to improve government's approach to information technology.

My name is Trey Hodgkins, and I am the senior vice president for the Public Sector at the Information Technology Industry Council where I manage our public-sector-facing practice called the IT Alliance for Public Sector, known as ITAPS.

The tech sector has for some time been leading the focus on evolving the way the government acquires and manages information technologies, moving them from practices, processes, and protocols too often rendered in an era that predates the Internet to the 21st century. Our members believe such a transformation is necessary to fully apply today's technologies to government missions.

Early in the current administration, industry helped develop goals to kick-start such an evolution. USDS and 18F embodies some of those pursuits, including bringing about cultural and process change. These include using agile instead of waterfall development methodologies, designing system space on end user needs in the context of the agency mission, and leveraging a multigenerational workforce. In many ways, 18F and USDS are positioned to be key enablers in the efforts to achieve a digital government.

ITAPS regularly advocates for institutional disruption in the way the government buys and manages IT, and we embrace 18F and USDS as disrupters in the Federal space. They also manifest what the tech sector has been saying for some time: breaking out of the old processes allows innovation to flourish. Contractors do not have that same flexibility in today's market with strict contract requirements, static funding cycles, and a rigid compliance structure. If contractors were to suggest innovative and perhaps time- and money-saving solutions, their bids would be deemed nonresponsive because they did not follow the requirements and essentially be disqualified. Both of these programs have demonstrated how innovation can be injected into government if you peel away the layers upon layers of rigid process now in place. Imagine what could be accomplished if we were to permit companies to think outside the box in the same fashion.

We believe that these initiatives, like any new startup, faces pitfalls and obstacles. In the remainder of my comments, I will offer recommendations on areas to focus practices to adjust and outcomes to illuminate in order to sustain them into the next administration.

People do not always embrace change, and disruption can also expose programs to risk. We believe the risk facing these programs can be grouped into three categories, which are people, management, and technology. And I provide greater detail on these in my

written testimony. These programs should address these risks and mitigate for them.

Based on our discussions with vendors and government personnel, there is a general lack of clarity and understanding about these programs. What are they doing? What are they not? And how can they be expected to operate? This opaqueness has created a degree of uncertainty, concern, and suspicion.

To address and counter these perceptions and to ensure that these programs can be sustained into the future, attention should immediately be paid to creating a very transparent and open operating environment. Furthermore, applying comprehensive metrics will provide oversight to ensure the interests of the taxpayers and to demonstrate that these programs are not wasteful of time and resources.

The committee also included the formation of the Technology Transformation Service, TTS, in today's discussion. As the operational arm of a list of OMB initiatives and policies, GSA needs to clearly explain how these new roles and responsibilities relate to their mission and to the broader industrial base and how and with whom they will engage.

GSA should also clearly explain how the entity is to be funded, where their authorities and personnel come from, and whether these activities must be authorized by statute. Leaving these and other questions unaddressed will expose 18F and GSA itself to challenges from uninformed stakeholder communities. ITAPS believes that a number of adjustments should be made to the programs to best position them for a clear trajectory into the next administration. Each program should clarify their mission. 18F in particular has expanded the reach and scope of their activities and created a condition where 18F acts as both the buyer and the seller. This is a conflict of interest, and such authorities should not be added to their portfolio at this time.

Both 18F and USDS should remain focused on the original delivery models. Both programs in the TTS should immediately embark on an effort to become transparent in their operations and to ensure that stakeholders have clarity of purpose for the programs and understand how they can engage. Further, we believe that until the recommended transparency can take hold and effective assessment and analysis can occur, GSA should postpone formalizing TTS.

Finally, both programs must find ways to effectively and robustly partner and not compete with new and existing government vendors to deliver better solutions.

The technology industry wants to incubate a transformation in the Federal IT market that brings about new ways to fund, develop, procure, deliver, manage, and sustain innovative technology solutions. We support 18F and USDS and believe that they can enable elements of such a transformation. We also want this transformation to improve the technological experience for everyone: constituents and citizens, taxpayers, government employees, and vendors. ITAPS remains committed to working with our government partners to achieve such success.

With that, I conclude my remarks, and I'm happy to address your questions.

[Prepared statement of Mr. Hodgkins follows:]

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Introduction

Chairmen Hurd and Meadows and Ranking Members Kelly and Connolly, thank you for the opportunity to share our perspectives regarding the U.S. Digital Service (USDS) and the General Service Administration's (GSA) 18F and their efforts to improve government's approach to information technology. My name is Trey Hodgkins. I am the Senior Vice President, Public Sector, at the Information Technology Industry Council (ITI), where I manage our public sector facing practice called the IT Alliance for Public Sector (ITAPS).

ITAPS is an alliance composed of leading information technology (IT) companies building and integrating innovative technologies and solutions for the public sector market. With a focus on the federal, state, and local levels of government, as well as on educational institutions, ITAPS advocates for improved procurement policies and practices, while identifying business development opportunities and sharing market intelligence with our industry participants. Our parent organization, ITI, is the global voice of the tech sector, celebrating its 100th year in 2016 as the premier advocacy and policy organization for the world's leading innovation companies. In both the U.S. and in countries around the world, ITI navigates the relationships between policymakers, companies, and non-governmental organizations, providing creative solutions that advance the development and use of technology around the world. You can learn more about both by visiting www.itic.org and itaps.itic.org.

The Tech Sector Supports Efforts to Identify New Ways of Procuring and Managing Federal Information Technology Assets

For quite some time now, the tech sector has been leading the focus on evolving the way the government acquires and manages information technologies (IT), moving them from practices, processes, and protocols too often rooted in an era that pre-dates the internet, to the 21st Century. Such a transformation is necessary in order to fully apply today's technologies to government missions.

Early in the current Administration, industry worked with the first Federal Chief Information Officer (CIO) to develop recommendations to kick-start such an evolution presented in a report titled the _Government Technology Opportunity for the 21st Century_, which was a template for the Office of Management and Budget (OMB) 25-point Plan. Although pursued under different names, the same basic recommendations are still being implemented. USDS and 18F seem to embody some of those pursuits, including bringing about cultural and process change. Aligned with the cultural changes these recommendations proposed, 18F and USDS are using agile - instead of waterfall - development methodologies, designing systems based on end-user needs in the context of the agency mission, and leveraging a multi-generational workforce. Regarding some of industry's process change recommendations, these groups are working to identify means to more appropriately apply the Federal Acquisition Regulations (FAR) to technology transactions, enable rapid prototyping contracting and procurement opportunities, and map out options to move away from legacy systems. In some ways, 18F and USDS are positioned to be key enablers in these efforts to achieve a digital government.

ITAPS is committed to working with government stakeholders to see these initiatives succeed now and into the next Administration as part of the overall effort to reform the identification, acquisition, investment and management of IT in the federal government. We believe, however, that these initiatives, like any new start-up, face pitfalls and obstacles that could increase the risk of failure in the long run and my comments are meant to offer recommendations on areas to focus, practices to adjust, and outcomes to illuminate in order to sustain them into the next Administration.

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18F and USDS Can Be Disrupters for Good

ITAPS regularly argues that we need institutional disruption in the way the government buys and manages IT, and 18F and USDS are positioned to be disrupters to help achieve that goal. They have the potential to bring cultural change and business process re-engineering to agencies that have struggled with change. They offer new ways to think about IT in a process-bound system, offer quick deployment of new ideas for agencies to incorporate into programs, and they can help build the organic IT skill set by transferring their knowledge to the career government workforce. They can also help identify and bring new government offerors into the market to increase competition, expand innovative solutions from existing players, and inject private sector perspective into solving government problems.

USDS and 18F also manifest what the tech sector has been saying for some time – that if we could break out of the old processes, innovation can flourish, and the companies in the industrial base are prepared to deliver that right now. Evidence of this can be found in a blog post by USDS founder, Mikey Dickerson, here. In it, Mr. Dickerson talks about how USDS created a new job tool at the Department of Veterans Affairs and how they shaved both time and $14 million dollars off the project. But they did that by being permitted to think outside the box and outside the confines of the existing hide-bound acquisition processes. Contractors do not have that flexibility in today's market with strict contract requirements, static funding cycles, and a rigid compliance culture. If contractors were to suggest innovative and perhaps time and money saving solutions under those circumstances, they would be disqualified in almost every competition because they did not follow the requirements. Both of these programs have demonstrated how innovation can be injected into the government if you peel away the layers upon layers of gunk that now corrode and distort the acquisition process. Imagine what we could accomplish in the government market if we were to permit all companies to think outside the box to solve government mission challenges.

But people do not always embrace change, and disruption can also expose programs to the risks that could lead to failure. These categories of risk involve people, management and technology.

People
- the risk of bureaucratic atrophy if career employees are left with the impression that they've failed;
- the risk of alienating the workforce by not empowering them with enhanced skills through knowledge transfer to address long term IT challenges;
- the risk of undermining workforce innovation by pitting generations against each other;

Management
- the risk of failure by giving people the impression they can "fix" a "broken" project;
- the risk of failure to capitalize on existing institutional knowledge;
- the risk of unwanted oversight by giving appearances that the rules do not apply or process does not matter;
- the risk of alienating policy stakeholders by engaging in policy formulation in a way that seem self-serving;

Technology
- the risk that non-18F and USDS IT programs are perceived as "non-innovative;"
- the risk of alienating partners who can effectively scale solutions by insinuating that contractors are the problem
- the risk of project failure because data is not created and maintained under the control of the CIO;
- and, the risk of threatening business models and product offerings by not following OMB guidance on tech neutrality.

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ITAPS would like to see efforts to mitigate these risks as part of an approach to sustain these activities going forward.

Transparency and Data Can Demonstrate Success

Based on our discussions with vendors and government personnel, and on the availability of public records on their activities, there is a general lack of clarity and understanding about these programs; what they are, what they are not, and how they can be expected to operate. This opaqueness in the operations of these programs has created a degree of uncertainty, concern, and suspicion. For example, the activities of USDS and 18F are reported to be focused on assisting agencies and their career personnel in making better decisions about IT and IT investments. Instead, we have repeatedly been told that intervention by 18F and USDS is not a welcome experience, leaving agency and contractor personnel feeling that they have failed, and without any sense of shared knowledge or experience after the team departs. Moreover, from time-to-time, the apparent lack of institutional memory and understanding of the process by 18F and USDS personnel has led to skepticism of their utility.

To address and counter these perceptions, and to better understand the programs and ensure that they can be sustained into the future, attention should immediately be paid to creating a very transparent and open operating environment. These new, transparent operating environments should provide:

- Specific and detailed information on all of their past and current projects. Such data should be published on public dashboards or websites and provide a clear and full accounting of the effort;
- A detailed account of their hiring authorities and practices, including information demonstrating that they are ensuring there are no conflicts of interest inherent in the personnel they hire and how that might influence products and services chosen as part of solutions;
- Detailed information regarding their funding authorities and an accounting of the funds they have collected and expended;
- A detailed value assessment based on a comprehensive methodology that includes, not only benefits, but also all direct and indirect costs;
- Their procurement authorities and what thresholds apply;
- A clear statement of their adherence to the practice of tech neutrality in their search for solutions for agency customers;
- Clarity around the use of competition to select products and services for use both internally and externally as part of solutions;
- Demonstrated adherence to government standards and requirements for everything from procurement to security.

While some may complain that requirements of this sort would constrain the intentionally unconstrained nature of these programs, comprehensive metrics, such as these, are the only yard stick the government currently has to assess the health of a program, to appropriately provide oversight to ensure the interests of the taxpayers and to demonstrate that these programs are not wasteful of time and resources.

Operations that Support their Activities

18F is housed at the GSA and USDS is housed as part of the White House. Both are offshoots of the Presidential Innovation Fellows (PIF), also now housed at GSA. GSA has increasingly been directed to operationalize a number of

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programs originating from policy pronouncements by OMB. GSA created a new service, called the Technology Transfer Service (TTS) to house 18F, the PIF and a variety of other activities. Unfortunately for these projects housed there, GSA and OMB did not socialize these plans with stakeholders and impacted parties, including within GSA, and the effort is left without a clearly identified purpose and stakeholders are unclear on shifting roles and responsibilities. To their credit, leadership from GSA is seeking to establish a dialogue and is reaching out to groups like ITAPS for feedback.

Socialization and communications efforts by senior GSA leadership must address both internal and external stakeholder concerns. The internal concerns regard roles and responsibilities of personnel focused on IT, in particular the IT offered through the multitude of GSA contracting vehicles in the Federal Acquisition Service (FAS) and the IT offered by 18F. Part of the announcement for the TTS included the provision of procurement authority for IT at TTS, something previously confined only to FAS at GSA. This apparent expansion of procurement authority has spawned a round of questions about the roles of the GSA workforce at FAS, how the new service fits into the current GSA model, how these services are intended to interact to drive a better experience for the government customer, and whether GSA is embarking on a previous centralization effort that failed and was repealed.

The external communication must first address the vendor community, which is now unclear on where and how to invest to ensure their goods and services remain available to potential government customers. Is it with FAS, with TTS, or both? If it is with TTS, or both, how can vendors make those investments and to whom should they initiate discussions?

Finally, as the operational arm of a list of OMB initiatives and policies, GSA needs to clearly explain how the new roles and responsibilities relate to the broader industry base, and where and with whom they should engage. GSA should also clearly explain and communicate other elements of their operation, like how the entity is to be funded, where will their authorities and personnel come from, and whether these activities must be authorized by statute. Leaving these and other questions unaddressed will expose the programs and GSA itself to challenges from disaffected stakeholder communities opposed to these changes.

Right-Sizing 18F and USDS

ITAPS believes that a number of adjustments should be made to the programs to best position them for a clear trajectory into the next Administration.

Mission and Purpose
First, as noted above, it is unclear that either program has developed a mission statement and clearly explained what their respective programs does and does not do. Each should clarify such a mission statement and share them with the public and stakeholders. Both programs should also take steps to ensure that their mission does not conflict or create redundancies with the missions and responsibilities of other agency officials, or with other programs that exist in government.

Scope
18F, in particular, has expanded the reach and scope of their activities to include, among other things, direct procurement of technology and engagement in the state public sector market. Taking on direct procurement authorities is very different from helping a government customer understand requirements, identify market activity, conduct market research, and other forms of advising on an IT investment. The announcement of the creation of TTS included that FAS would be detailing procurement personnel to TTS for this purpose, but 18F and TTS have no

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inherent acquisition experience or knowledge and taking on this responsibility clearly establishes a duplication and possible conflict with the procurement responsibilities of other government agencies and activities, including GSA itself. Further, creating a condition where 18F acts as both the buyer and the seller is a conflict of interest and should be avoided. As such, these authorities should not be added to their portfolio. Likewise, because it is unclear that the program has established a sustainable level of success in the federal market, it is unclear why expanding into a far more challenging and diverse, multi-jurisdictional marketplace is not a diversion of resources and focus from the federal efforts. 18F should remain focused on their original delivery model of user-centric development of digital and web services, and should forego other activities that are redundant and duplicative and have the potential to become a quagmire of varying jurisdictional challenges.

Transparency
As noted above, it is our recommendation that 18F and USDS should immediately embark on an effort to bring needed transparency to their operations and to ensure that all interested stakeholders have clarity of purpose for the program and understand how they can engage.

A Pause
Until the recommended transparency can take hold and stakeholders and oversight entities can effectively assess and analyze the activities, including direct and indirect costs and the value the programs deliver, the Administration should postpone formalizing TTS at GSA. Such a pause would better ensure that these programs, their activities and the value they can deliver are best positioned for a Presidential transition and sustainment into the next Administration.

Partnership
Both of these activities must find a way to effectively and robustly partner, and not compete, with new AND existing government vendors to deliver better solutions. The government industrial base includes a multitude of talented and innovative companies that can and do deliver cutting-edge capabilities on a daily basis. Both programs should share best practices on how government can unlock this potential. Also important is the fact that the existing government vendor base understands, and has made an investment in, compliance with the myriad of government-unique requirements and can be a bridge over these government barriers as partners with new non-traditional companies.

Change is Needed for Success

According to press reports at the time, USDS was begun in the wake of the failure of the Healthcare.gov website as a way to capture the technology talent that was assembled to correct that project and direct it to other technology problems within federal government missions, and 18F was a government start-up that would bring a user-centric focus for the development of digital and web services. From the beginning, it was always difficult to discern exactly what the mission and objectives for each of these entities was, and time has not helped bring them into focus.

Instead, both missions remain vague and their activities opaque, and that vagueness and opaqueness is contributing to an inability to gauge success. It has also never been clear to stakeholder audiences where these activities fit alongside the federal government's technology community and the myriad community of vendors who offer services that are the same, or very similar to, what both entities claim as their purview. In other words, it is hard to tell how these activities are different from what is already being done, and if they are demonstrably better. So far, it is just different.

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More important to this conversation is that this lack of clarity makes it hard to see these programs surviving a Presidential transition. Start-ups, like these, without clear definition, mission, and sound funding, have a much more difficult time in an environment where priorities are shifting and agencies are recasting themselves for new political leadership. If the value USDS and 18F can bring to this technology transformation is to survive the Presidential transition, changes have to occur in both programs to clearly define their mission and their place in the broader federal technology landscape. Maintaining business as usual in these programs, instead of implementing needed transparency and developing comprehensive data to demonstrate these activities offer a path to a better federal technology environment would not position them well for future success.

The technology industry wants to incubate a transformation in the federal IT market that brings about new ways to fund, develop, procure, deliver, manage, and sustain innovative technology solutions. It also wants this transformation to improve the technological experience for everyone – constituents and citizens, taxpayers, government employees, and vendors. ITAPS remains committed to working with our government partners to see that transformation succeed, including sustaining a focus on these objectives into the next Administration.

Mr. HURD. Thank you, sir.

Mr. LeDuc, you are now recognized for 5 minutes.

STATEMENT OF DAVID LEDUC

Mr. LEDUC. Thank you, Chairman Chaffetz, Chairman Hurd, Chairman Meadows, and Ranking Member Kelly. On behalf of the Software & Information Industry Association, thank you for the opportunity to testify today on oversight of the U.S. Digital Service and 18F.

SIIA is the principal trade association for the software and digital content industries. SIIA commends the Obama administration for its work to update and enhance the Federal Government IT framework, which has strived to evolve Federal IT to become more modular, agile, and cloud-focused, and we support much of the core missions of both the USDS and 18F to help agencies buy and share efficient and easy-to-use digital services.

But we have reservations with respect to several aspects of the 18F program.

First, 18F's focus on "build custom" departs from the longstanding reliance on a "buy, not build" IT procurement policy. The "buy, not build" or commercial off-the-shelf, COTS, first approach is a longstanding critical proponent of Federal IT policy. This approach is underscored in the revised Circular A–130 and shared-services policies put forward by this administration.

Choosing vendor-supported solutions recognizes that agencies often lack and are challenged to maintain consistent and necessary IT management staff. They also benefit from economies of scale, among other advantages. When choosing vendor-supported off-the-shelf solutions, vendors are in the best position, working with their agency customers, to provide relevant updates, assurances of security and performance. However, 18F is focusing on a "build custom" approach to develop new solutions that are likely to require sustained, meaningful, and experienced support plans, which are not necessarily available as part of the solutions provided by 18F. The importance of ongoing support for agency solutions cannot be overstated, and agencies cannot afford for this to be overlooked.

Competition from 18F can only be expected to grow stronger over time for private IT vendors, particularly affecting small businesses.

Second, 18F has the ability to operate outside of the traditional procurement process with the dual role of design agency procurements and to compete for the opportunity to provide the solutions without sufficient transparency and oversight. 18F combines policy-making functions, operations, and promotion of their own products and services sales. This is an area where there are many questions about the operation of 18F and not many answers.

It appears that 18F could be deployed to design acquisition plans and RFPs and then have an opportunity to respond to that RFP, essentially as a sole-source consultancy. This end result is not likely to achieve the best value for agencies, and it can ignore innovative ideas from the government—outside the government.

Private sector IT solution providers doing business with Federal agencies must demonstrate their compliance with critical security requirements such as business security certifications or the often onerous Federal approval process. 18F should face no less rigorous

standards and scrutiny and not be prioritized over offerings be-
cause of its address at 18th and F Street.

Additionally, a particular concern to this committee mentioned
by Mr. Powner earlier, the risk is that 18F could negate the steps
taken to establish appropriate agency CIO oversight established in
FITARA.

Third, 18F must be required to cover its costs in offering agency
IT services, but transparency is currently lacking in this area as
well. 18F should be required to provide a detailed assessment of
services provided as well as revenues and expenses to demonstrate
whether they are covering costs. And if they are not, they should
be required to provide a plan for cost recovery in the near future.

Without a sufficient transparency mechanism in this area, it is
difficult to make an apples-to-apples comparison between 18F serv-
ices and the private sector services.

Fourth, the unanswered questions and lack of transparency are
particularly concerning given the expansion and recent GSA reor-
ganization of 18F. 18F launched in March 2014, as we know, as a
15-person team of innovators and has grown today to a total of 183
personnel across four nationwide offices. We are concerned the ad-
ministration is moving very quickly to embed and make permanent
the 18F program without seeking input from Congress or working
with other agencies and without addressing the issues we have
identified.

As an internal government IT consulting service, 18F should un-
dergo the traditional oversight and scrutiny by both Congress and
the administration to ensure that it will stay within a well-defined
designated lane.

In closing, following our three recommendations, we offer to help
guide 18F towards the well-intended goals of the organization:
first, greater transparency on costs and process; second, adherence
to the current "buy first" approach of commercial off-the-shelf prod-
ucts, consistent with Federal Government IT policy; and, third, a
requirement to function by the same rules as other IT vendors,
needing to provide for the same level of scrutiny and comparisons
on cost.

Thank you, again, for the opportunity to testify today, and I look
forward to answering any of your questions.

[Prepared statement of Mr. LeDuc follows:]

Chairman Hurd and Chairman Meadows, Ranking Members Kelly and Connolly, and members of the Subcommittee, on behalf of the Software and Information Industry Association (SIIA), thank you for this opportunity to testify before you today to discuss 18F and U.S. Digital Service (USDS) Oversight.

The Software & Information Industry Association (SIIA) is the principal trade association for the software and digital information industries. The more than 700 software companies, data and analytics firms, information service companies, and digital publishers that make up our membership serve nearly every segment of society, including business, education, government, healthcare and consumers. As leaders in the global market for software and information products and services, they are drivers of innovation and economic strength—software alone contributes $425 billion to the U.S. economy and directly employs 2.5 million workers and supports millions of other jobs.

Introduction

SIIA Commends the Obama Administration for its work to update and enhance the Federal Government IT Framework, which has strived to evolve federal IT to a more modular, agile, cloud-focused approach, and we support much of the core mission of both the USDS and 18F.

For many years, SIIA has been a strong supporter of the Obama Administration's efforts to modernize federal IT. From early initiatives to open Federal data, to having federal agencies use, buy and share cutting-edge solutions, and continue the significant progress we have seen over recent years to enhance the way government uses technology to serve the American public.

SIIA supports the goals of 18F to help agencies buy, and share efficient and easy-to-use digital services. For instance, SIIA supports 18F's core objectives and efforts to take a flexible, customer-centric approach, where federal IT acquisitions can be faster, cheaper, and produce better results. 18F is potentially well suited to help agency customers identify and use innovative technology, where they can apply technical advice to help agencies develop new requests for quotation for IT services.

For instance, 18F is well served to work with federal agencies to help write agile, modular, and user-centered design into agency requests for quotations, the development of a marketplace for Federal agencies to buy IT services using modern techniques, as well as their work with agencies to provide data sets for the public to search, understand, and share government data.

These are just a few examples of how 18F is able to help federal agencies through its innovative, customer-centric approach. However, we also have several questions and concerns about 18F, such as 18F's "build custom" IT approach, their ability to operate outside of the traditional procurement process, the lack of transparency surrounding cost

coverage and the recent reorganization of 18F within the Technology Transformation Service (TTS). These questions and concerns are highlighted below, along with recommendations to help guide 18F towards the well-intended goals of the organization.

1. **18F's focus on "build custom" departs from the longstanding reliance on a "buy, not build" IT procurement policy, presenting both unnecessary competition with the private sector and the risk of a legacy of "government-off-the-shelf solutions."**

   At the May 25th hearing before this Committee on Legacy IT, Federal CIO Tony Scott reiterated the Administration's commitment to rely on the "buy, not build" approach, saying, "we're encouraging the buying of services rather than developing them themselves."

   This "buy, not build," or COTS-first approach is a long-standing, critical component of Federal IT policy. For instance, the Administration's Shared Services Strategy emphasized the key role of commercial organizations in providing the actual IT shared service to agencies, in the context of growing use of commodity IT, modularity, and "open solutions," while reducing duplicative support. The issue goes deeper than that one policy, however. As the update to Circular A-130 clearly puts it to agencies, "All IT systems and services operate only vendor-supported solutions, and planning budgeting activities incorporate migration planning and resourcing to accomplish this requirement."[1] Why? As OMB has said consistently, choosing a vendor-supported solution avoids the risk of agencies pursuing "government-off-the-shelf" solutions, and recognizes that agencies often lack (and are challenged to maintain) consistent and necessary IT management staff. They also benefit from economies of scale, among other advantages, when choosing vendor-supported commercial-off-the-shelf solutions. Vendors—whether the IT product is proprietary or open source—are in the best position, working with their agencies customers, to provide relevant updates, assurances of security, and performance.

   However, 18F has taken a different fork in the path, focusing on a "build custom" approach to develop new solutions that are likely to require sustained, meaningful and experienced support plans, which are not necessarily available as part of solutions provided by 18F. The importance of ongoing support for agency solutions cannot be overstated, and agencies cannot afford for it to be overlooked.

   As a result, U.S. technology companies face direct competition from a government-backed entity. Private sector providers, who in many cases may be capable of providing a better, more secure product at a cheaper price, run the risk of being effectively excluded from 18F initiatives. Competition from 18F can only be expected to grow stronger over time, and this particularly affects small businesses.

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[1] OMB. Proposed update to Circular No. A-130, *Managing Information as a Strategic Resource*. Oct. 21, 2015.

Additionally, 18F expanded its consulting and acquisition services earlier this year to assist federal agencies that provide grants to state and local programs, essentially offering the same consulting and acquisition services to states and local governments as it does to federal agencies. This expansion of services beyond the Federal Government raises a serious question about the role of the Federal Government in picking technology winners and losers, and in some cases is likely to present competition with private sector vendors who already invest heavily in the state and local market.

2. **18F has the ability to operate outside of the traditional procurement process, with a dual role to design agency procurements, and to compete for the opportunity to provide agency solutions, without sufficient transparency and oversight.**

18f has largely been marketed as a solution to agencies looking to update and modernize their outdated IT, particularly where agencies are hamstrung by outdated procurement policies. In their own terms, 18F has been characterized as "passionate about 'hacking' bureaucracy to drive efficiency, transparency, and savings for government agencies."[2]

As I said at the outset, the objectives to modernize IT to more modular, citizen-centric solutions, are widely shared. But in many cases it is the policies themselves that are in need of fixing, rather than a new federal consulting entity with the ability to sidestep (or interpret as convenient) the regulations and policies that IT vendors are forced to comply with.

Perhaps most concerning, 18F combines policy-making functions, operations and promotion of their own product and service sales. As currently structured, 18F has a unique role working alongside agencies to help them craft RFPs and purchase agreements. This is an area where there are many questions about the operation of 18F and not many answers due to the lack of transparency around 18F to date.

Indeed, it appears that 18F could be deployed to design acquisition plans and RFP's, and then have an opportunity to respond, often before the RFP's may even be announced. There appear to be no restrictions on 18F from being engaged by agencies to address specific problems with IT projects, essentially a sole source consultancy.

This multi-purpose structure enables 18F to both influence the expansion of their own services while charging the agency who is paying for these 18F implementation services, ultimately eliminating competition by self-selecting their own people and

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[2] 18F. "_Hello, world! We are 18F._" March 19, 2014.

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mapping their own capabilities and technology preferences to an agency's digital delivery goals. The end result is not likely to achieve the best value for agencies, and it ignores innovate ideas from outside government.

Private sector IT solutions providers doing business with federal agencies must demonstrate their compliance with critical security requirements, such as FISMA security certifications or the often onerous FedRAMP approval process. For instance, the Federal Government has moved to ensure that federal cloud service providers are required to obtain FedRAMP certification in order to compete for government business. The FedRAMP certification process is long and expensive for cloud service providers (CSPs) averaging more than 12 months and costing millions of dollars.

But there is a lack of clarity, and potential oversight, around 18F's development and offering of cloud services as a CSP. Their Platform as a Service (PaaS) solution, Cloud.gov, was recently announced as "FedRAMP Ready," a step that indicates a CSP is ready for agency or FedRAMP Program Management Office (PMO) detailed reviews required to become "FedRAMP Compliant" and gives agencies the confidence that the SSP documentation meets the FedRAMP PMO's quality and security standards that are necessary to initiate the assessment and authorization process with the Joint Authorization Board (JAB).[3] Given the substantial challenge the FedRAMP approval process poses to private sector CSPs, the review of Cloud.gov should be an independent process, no less rigorous and not be prioritized over private offerings because of the proximity and close working relationship of 18F and FedRAMP within GSA.

There is also the broader question of why 18F chose to create Cloud.gov when there are already other commercial-off-the-shelf platforms available? According to the Cloud.gov project lead, "18F is going to be a model CSP in the federal space," and "Cloud.gov is only part of the equation."[4]

Additionally, of particular concern for this Committee is the risk that 18F could negate the steps taken to establish appropriate agency CIO oversight established in the Federal Information Technology Acquisition Reform Act (FITARA). As directed by OMB, FITARA seeks to "Strengthen the agency CIO's accountability for the agency's IT cost, schedule, performance, and security" and establish "common baselines" for roles, responsibilities and authorities of agency CIOs.[5] Yet, in many respects, it appears that 18F operates outside these parameters, ones which this Committee spent years defining and establishing through statute.

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[3] Fretwell. "Cloud.gov gets FedRAMP ready." *Govfresh*. June 5th, 2016
[4] Ibid.
[5] OMB. "Memorandum for Heads of Executive Derpatments and Agencies." *Management and Oversight of Federal Information*. June, 2015

3. **18F must be required to cover its costs in offering agencies IT services, but transparency is currently lacking in this area.**

   Services provided by 18F, which are provided on a fee-for-service basis, charged to agency customers, not only pose direct competition with existing private sector services, but they are currently lacking transparency on whether costs are fully recovered. In the absence of transparency in this area, 18F is operating outside of parameters that are required for private sector vendors doing business with federal agencies. 18F should be required to provide detailed assessment of services provided, as well as revenues and expenses to demonstrate whether they are covering costs— and if not, they should be required to provide a plan for cost recovery in the near future. The private sector IT providers with which 18F competes with are forced to document their cost and expenses and ultimately must cover their costs.

   Without sufficient transparency in this area, it is difficult to make an apples-to-apples comparison between 18F's services and private sector entities who provide similar solutions.

4. **The unanswered questions and lack of transparency are particularly concerning given the expansion and recent GSA reorganization of 18F.**

   18F launched in March 2014 as a 15-person team of innovators, designers and developers recruited from the private sector to improve the government's digital services. Since then, the unit has grown to a total of 183 personnel across four offices nationwide.

   The Administration is moving to embed and make permanent the 18F program quickly, without seeking input from Congress or working with other agencies, and without addressing the issues identified above. Just last month, GSA announced the creation of the TTS, a new unit composed of 18F, the Office of Citizen Services and Innovative Technologies and the Presidential Innovation Fellows program.[6] The new organization was described by GSA Administrator Denise Turner Roth as a "launchpad to set us up for the next big expedition for the federal government in technology."

   This is highly concerning given the unanswered questions about process, cost and competition. 18F should undergo the traditional oversight and scrutiny by both Congress and the Administration to ensure that 18F will stay within a well-defined, designated lane as an internal government IT consulting service.

   Further — 18F, the Office of Citizen Services, USDS & PIF — are serving as a model for agencies throughout the government. There is an opportunity to provide oversight,

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[6] Moore. "GSA Announces New Governmentwide Tech Unit that will House 18F." *Nextgov.* May, 2016

and perhaps give direction to how these organizations should be implemented and managed.

Conclusion

There is no question the federal government needs to update and modernize systems, and there is value for the Government to maintain a cadre of technical experts who can assist agencies in developing their plans and 'common baselines', but these objectives should not come at the cost of competing with private sector providers who operate in a competitive environment. Nor should 18F be able to operate without adequate transparency and oversight.

The establishment of a federal digitization team is a good idea for agencies, but there is an open question about the boundaries and the necessary oversight and the ability to ensure that 18F does not in fact raise costs to the Government or result in products that lack sufficient support. GSA should be able to better explain the value of an internal government consulting service and product sales function that operates through a competitive fee-for-service business model.

In closing, following are three key requirements to help guide 18F towards the well-intended goals of the organization:

- Greater transparency on cost and process,

- Adherence to the current "buy first" approach of commercial-off-the-shelf products, consistent with Federal government IT policy,

- Requirement to function by the same rules as other IT vendors, needing to provide for the same level of scrutiny and completion on costs.

Mr. HURD. Thank you, Mr. LeDuc.

I would like to now recognize Mr. Connolly for his opening remarks.

Mr. CONNOLLY. Thank you, Mr. Chairman.

And I'm sorry I'm late. Mr. Meadows and I were in a postal reform working group meeting for the committee.

This hearing is exactly the type of oversight, it seems to me, that we can agree on on a bipartisan basis. Today's hearing gives us the opportunity to hear from the administration about two programs that are playing an important role in the administration's efforts to modernize and improve IT, Federal IT.

The Federal Government spent, of course, $80 billion in IT in 2015. Mr. Powner, you testified before the full committee just 2 weeks ago that agencies are spending up to 70, 75 percent of that money on legacy IT systems. GAO's high-risk list includes management of IT acquisitions and operations. Agencies need to modernize their systems and their way of thinking about IT investments. The creation of the U.S. Digital Service and 18F in 2014 brought some critical focus to those issues.

In 2014, Congress passed, of course, the FITARA legislation, the Federal Information Technology Acquisition Reform Act, better known Issa-Connolly. One of the most important changes of that bill was to provide agency CIOs with the authority to make spending decisions related to IT in a more streamlined and efficient manner. The law also requires CIOs to certify progress on ongoing IT investments. Congress gave CIOs that authority and responsibility for a reason. It's imperative that 18F and Digital Services coordinate with CIOs to ensure that the agencies have a sense of accountability for their investment decisions and also ensure agencies adopt and institutionalize best practices and share them.

There are many success stories over the last 2 years that we look forward to, Ms. Chrousos and Mr. Dickerson highlighted in their testimony. It was refreshing to see that the GAO found positive customer satisfaction with both 18F and Digital Service.

I'm proud to cosponsor the Information Technology Modernization Act, which would create a revolving fund for updating outdated IT systems under the bill. 18F would use its expertise to ensure that agencies have used best practices such as agile development.

As Mr. Powner testifies today, there are some areas where both 18F and the U.S. Digital Service can improve and should improve their communications, transparency, coordination, and outreach. I know those are concerns in the private sector, which looks at 18F maybe with a mixed and jaundiced eye.

GAO found in its review of these programs that the U.S. Digital Service and agencies could do a better job of incorporating the agency CIO into the work of Digital Service terms. We are interested in hearing from the witnesses today how 18F and the Digital Service can improve communication with stakeholders and work with the private sector to ensure that the work of those programs is transparent and that the Federal IT portfolio is as effective and as efficient as possible.

I appreciate the commitment the employees of 18F and Digital Service have made to this government. They are bringing the les-

sons they have learned from the companies and organizations they come from to improve Federal IT management procurement. Just as technology has led to private sector job growth, it can also inspire Federal Government recruitment of the best and the brightest.

Thank you, Mr. Chairman, for holding the hearing.

Mr. HURD. I'd like to now start our questioning portion of this event. And we're going to start with the gentleman from Texas, Mr. Farenthold.

You are recognized for 5 minutes.

Mr. FARENTHOLD. Thank you, Chairman Hurd.

As a former computer consultant and Web designer, I guess, on a very small scale, I did some of what 18F and USDS did. So it's an issue that I'm passionate about.

I do want to start off with the "buy, not build." Again, even from my days in the '90s, it was always cheaper to buy, not build.

Mr. LeDuc criticized 18F for not—for building not buying. And I wanted to give Ms. Chrousos 30 seconds if she wanted to respond to that.

Ms. CHROUSOS. Thank you for the opportunity to respond to that.

One thing that was clearly highlighted in the testimony of my fellow witnesses is that we haven't done a very good job of communicating what 18F does. Over the last 2 years, we have been very responsive to our customer agencies, and we absolutely take a buy-first approach. We have one service line that builds out prototypes and lite Web services, but that's done not in competition with the private sector but as a way to showcase modern methodologies and practices to agencies.

Mr. FARENTHOLD. Now, you indicated you came out of the private sector and into government. I want to ask another broad, general question here. There's a very different mindset, especially in the startup world in California or even working in a big company like Google, you know, where you have these big campuses with bicycles everywhere and free meals. How does the government compete for IT talent against that?

Ms. CHROUSOS. In one word, it's patriotism. So all of the people that come and join us are very mission-oriented, and they are leaving behind cushier environments, let's say, to come and work on projects that impact the American people.

Mr. FARENTHOLD. And you look at the technology and startup world, and there's a mentality of risk taking, and there's a huge push—the buzz word is "disruption." You change, fundamentally, the way things are done.

Now, obviously, the government is not in a position to take risks. And I think you can do technology without risks. Banks indicated that. I can do my banking on my phone now and feel relatively safe about it.

But how do you bring into the government a culture of disruption if that's how we really are going to fundamentally transform how things are done? And I'll let you answer that, Ms. Chrousos, and then I'd also like to hear from Mr. LeDuc on that.

Ms. CHROUSOS. Thank you. I think that's the delicate balance that we're always trying to balance.

How do you bring innovation but still make sure that it complies with all of the government policy is something that I personally think about every day as the Commissioner of Technology Service and as I try and mature my organization.

I think 18F faces this. The Digital Service team and agencies face this. The innovation labs and agencies face this.

Mr. FARENTHOLD. And so do you think that's the reason it takes so long to get something done in government IT? Is that the primary reason?

Ms. CHROUSOS. The balance?

Mr. FARENTHOLD. Yeah. Trying to—yeah, basically that.

Ms. CHROUSOS. Yeah. I believe it's a delicate balance. Even in the private sector, large companies in the private sector haven't figured that out either.

Mr. FARENTHOLD. Okay.

Mr. LeDuc did you want to—I'm sorry to rush you. I only have 5 minutes.

Mr. LeDUC. No. I mean, I think that makes a lot of sense. We are supportive of the goals of 18F, you know, and their approach to, as they say, hack the bureaucracy. You know, that's necessary in many areas, and we want to see more innovation, and we want to see more small startups brought in.

Mr. FARENTHOLD. Okay. Great.

And then, so, Mr. Dickerson, Ms. Chrousos, can you each tell me what you consider to be your group's biggest success story? You know, just 10, 15 seconds there.

Mr. DICKERSON. Sure. It's very difficult to pick just one, but one success story that we're proud is of vets.gov, which is a unified experience where veterans can get access to services that they need.

Mr. FARENTHOLD. What about 18F? What do y'all consider your biggest success?

Ms. CHROUSOS. Our biggest success is the Agile Blanket Purchase Agreement, which is bringing in agile talent from the private sector into government.

Mr. FARENTHOLD. So, Mr. Dickerson, you talked about vets.gov. Your top 10 priorities include electronic health records for Veterans Health Information Systems and Technology Architecture—that's VistA—a Medical Appointment Scheduling System, and Veterans Benefit Management System.

I have had countless hearings, and my number one source of complaints from my constituents is poor service from the VA, many of which are IT related. Even—you know, even to the point of suicide calls going to voicemail. Where are we going on that? Why can't we get that done faster? And what are y'all doing to fix it?

Mr. DICKERSON. Thank you. We are completely sympathetic and also feel just as acutely as you do the opportunities for improvement in all those services at the VA.

I have a small focus team at the VA as we speak today working on a few targeted opportunities in the service space.

Mr. FARENTHOLD. Okay. That doesn't sound like it's big and bold enough to solve the problem. So I would urge you to—is 18F doing anything with the VA at this point?

Ms. CHROUSOS. We had worked in partnership with the VA Digital Service team about a year ago, and we worked on a small component of their bigger picture.

Mr. FARENTHOLD. All right. Well, I think we need to sit down with the VA and you guys to see if we can get y'all working together. Because, again, I think the poor performance of the VA is a national disgrace. It needs to be addressed.

I have a lot more I could do, but there are a lot of people here, and I am out of time, so I'll yield back.

Mr. HURD. I would like to recognize the ranking member, Ms. Kelly, for 5 minutes of questioning.

Ms. KELLY. Thank you, Mr. Chair.

Two weeks ago, the full committee held a hearing on the Federal Government's use of outdated legacy IT systems. We learned that the Federal Government spent about 80 million on IT last year, most of which was spent on these old systems.

Clearly, we need to find a better path forward, and that's where the Digital Service and 18F come in.

Mr. LeDuc, in your written statement you said, and I quote: "We support much of the core mission of the both USDS and 18F."

What role do you think the Digital Service and 18F can play in the Obama administration's efforts to modernize Federal IT?

Mr. LEDUC. Thank you for that question.

As I mentioned, we're very supportive of the different thought process that 18F brings and their goal bringing in innovative IT companies, small IT businesses, and integrating that into agency solutions, working alongside of agencies to help them in designing their procurements and deciding what types of technology they need. We think 18F can be particularly helpful in that role, consulting two agencies to help them obtain the right technology.

Ms. KELLY. Okay. Does SIIA believe that the Digital Service and 18F are having an overall positive impact on modernizing the IT acquisition process?

Mr. LEDUC. Yes. I think we could say, you know, overall positive. But, as I mentioned in my testimony, we just want to make sure that, you know, it stays within—you know, a well-functioning lane to assist the agencies.

Ms. KELLY. Thank you.

Mr. Hodgkins, in your written statement, you said, and I quote: "In some ways, 18F and USDS are positioned to be key enablers in these efforts to achieve a digital government." In what ways do you think the Digital Service and 18F can enable the Federal Government to move into the digital age?

Mr. HODGKINS. Well, they are already serving as disrupters, as we just discussed, around the cultural change that is necessary. We actually had to change the thought process of the bureaucracies and how they look at technology, and then that translates into how they buy it. And they are a leading edge on many of the elements of those different equations that have to be changed before we can fully incorporate technologies.

Ms. KELLY. Thank you.

Does ITAPS believe that the Digital Service and 18F are having an overall positive effect on modernizing the IT acquisition? It is the same question.

Mr. HODGKINS. I think in certain areas, yes. I think that, in some areas, as we discussed, it's hard to tell because of the opaqueness of some of the things they are doing. And then there's still a lot of stuff left on the table that we can all continue to focus on.

Ms. KELLY. Thanks.

Ms. Chrousos, 18F's mission has always been to promote efficiency and innovation in the way Federal Government approaches IT. Can you provide a few examples of how the agile development is leading to more innovation and cost savings in government? I know you did one, but we want more than one.

Ms. CHROUSOS. We want more than one. That's wonderful.

We worked on the veterans—sorry. We worked on the Department of Education's College Scorecard, which—which unleashed 25 years of data that had never been seen before by the public. Today, it's being used by people going into college to make informed decisions about both what college they go to from an academic perspective but also how much they spend on college from a budgetary perspective.

That was an example—that was a very small lite build that took over—that took 3 months, and it showcased agile development, user-centered design, open data, the usage of APIs to the Department of Education, allowing them to get a better idea of what that looks like so that when they go out to vendors and the procurement community, they can actually talk about these things and weave that into their RFPs.

Ms. KELLY. Okay. And what are some of the steps you are taking to advance agile development across the government?

Ms. CHROUSOS. We showcase agile methodologies with lite prototypes and discovery sprints when we work with agencies hand in hand. That's when an agency hasn't done it before. So we absorb that first-mover risk of taking a leap into a new technology methodology.

We also are developing procurement vehicles. One—the first one is the agile development BPA, which used code review by our engineers to evaluate agile vendors. These are now prequalified, precertified vendors that we can access to work on projects and agencies can also access to work on projects.

Ms. KELLY. And two questions. What are some of your biggest successes, and can you identify some of the failed IT projects that 18F has helped to turn around?

Ms. CHROUSOS. One of the—one of our biggest successes is a turnaround, in my opinion. We worked with HHS to rewrite an RFP for a child welfare platform. We believe that the platform was going towards a large kind of waterfall singular buy, and we were able to break that down, insert modern technology methodology like agile user-centered design, 2-week sprints, open data, open code into the RFP. We hope that this yields savings for HHS, and we hope this also yields savings for others that can take this RFP, which is out in the open, and can use it for themselves.

Ms. KELLY. For Mr. Dickerson and Ms. Chrousos, what do your agencies bring to the Federal IT innovation that can't already be accomplished by the private sector?

Mr. DICKERSON. I think the most valuable role that the USDS brings into the government is the ability to coordinate and work

across all of the organizational boundaries to solve what are often very complicated problems with a lot of stakeholders that involve a lot of the parts of the agency.

Ms. KELLY. Thank you.

Ms. CHROUSOS. And I believe that we act as an ecosystem where talented people from the private sector can come in and learn how to adapt their practices to government and then show government how to do that.

Ms. KELLY. Thank you. And thanks for the extra time.

I yield back.

Mr. HURD. Now I am honored to recognize the distinguished gentleman from Michigan, Mr. Walberg, for 5 minutes of questions.

Mr. WALBERG. Thank you, Mr. Chairman.

And thanks to the panel.

Ms. Chrousos, as you indicated in your testimony, in 2 years, 18F has grown from 15 employees to 185, some significant growth. You also indicated part of 18F's mission is to help Federal agencies buy, build, and deploy technology the way the private sector does today, hopefully with efficiencies that the private sector does in many cases.

Can you describe the scope of work anticipated by 18F and how that work overlaps or duplicates capabilities present in the private sector or are being performed by the agencies themselves?

Ms. CHROUSOS. Thank you for the opportunity to answer that question.

I think we need to do a better job of explaining our service offerings to both our stakeholders and the private sector. We do not intend and we do not—in my opinion, we do not compete with the private sector. We offer five service offerings to agencies today, and we will be constantly iterating on those to respond to the needs of our customer agencies.

The first is to lightly prototype or build small builds to be able to showcase modern methodologies to agencies, which often yields in those agencies going out to the private sector to hire agencies— to higher developers that work like us. We offer acquisition assistance where we add an engineer or subject-matter, technical subject-matter expert to the table next to the contracting officer to help them rewrite request for proposals so that agencies can buy smarter. We offer some lite guides and workshops that help agencies understand how to practice modern technology methodologies in the government. We offer consultation services to CIOs who want to deploy to the cloud. These are the kinds of things that we offer, and I believe that our vantage point from bringing in private sector individuals into the government and explain to them how the government works and adapting those technologies out is where we play in this space.

Mr. WALBERG. Going from that, with the rapid growth that you've had, who are you hiring? Are you hiring programmers, program managers, acquisition staff? Who are the hires?

Ms. CHROUSOS. Technical folks, engineers, design thinkers, usability experts, definitely product managers that can help product manage teams that are coming in through the Agile BPA. Those are the types of hires that we're hiring.

Mr. WALBERG. Where do they come from?

Ms. CHROUSOS. They come from both private and public sector. So we looked across our organization. I actually sign off on every hire, and we have seen people come from Microsoft, come from Twitter, come from Booz Allen, come from some like foundations.

Mr. WALBERG. What's their average tenure?

Ms. CHROUSOS. Their average tenure, well, we hire using Smarter IT authority, which is a 2-year fellowship with 2 additional years—a 2-year term, sorry, with 2 additional years. The average tenure in the private sector in this field is around 13 months, to give you an idea of what this kind of workforce—how this workforce moves around. So we don't have—I don't have the average tenure right now on hand, but I suspect that it's around 2 to 4 years.

Mr. WALBERG. So significantly more than in the private sector?

Ms. CHROUSOS. I'm sorry. I don't have exact numbers, but I can work with your staff to get you the numbers.

Mr. WALBERG. Okay.

Mr. LeDuc, are there concerns in the software industry about how agency CIOs are being given information to make informed choices about who to turn to for help with IT concerns?

Mr. LeDUC. Yeah. I mean, as we understand, I mentioned this in my testimony, obviously, the structure put in place by FITARA and the goal for the CIOs to be able to monitor and determine the technologies to be used, the process that 18F could take in going to some of their services provided to agencies can very well go beyond this process and not effectively provide CIOs the opportunity to necessarily choose the technologies that they want to use. So we think that could be a real challenge area.

Mr. WALBERG. What's your biggest concerns about how the two agencies, 18F and USDS, have evolved in the past couple of years?

Mr. LeDUC. I think, as I mentioned, the biggest concern is about an evolution and a rapid growth of an entity like 18F that's not necessarily really visible in how they are behaving, you know, if they are making technology decisions quickly outside the traditional mechanisms. While that can be a really good thing, you know, as a goal of 18F to be modular and flexible—and we support that—rapid growth in this area without significant oversight and transparency could really lead to just a bunch of single-handed decisionmaking that could not provide agencies with the best solutions.

Mr. WALBERG. I yield back.

Mr. HURD. The gentleman yields back.

Now, I would like to recognize my friend from the Commonwealth Virginia, Mr. Connolly, for 5 minutes of questions.

Mr. CONNOLLY. Thank you, Mr. Chairman.

Mr. Powner, can you help us understand, because I think Mr. Walberg's line of questioning overlaps my anticipated line of questioning, which is, what is the value proposition here? Why do we have 18F and USDS? What is the value to the government, and how does it avoid competing directly with the private sector? Why not just issue our fee for these services like we normally do?

Mr. POWNER. Well, you could clearly do that. I think when I look at 18F and you look at where you could go procure really quick agile services and consulting in that, there's some value in that, no

doubt. Having agencies innovate on a small-scale basis and expand it, that makes a lot of sense with 18F.

Mr. Dickerson, we've always supported a SWAT team out of the White House that could parachute in, help save, help healthcare.gov. And we know there are a lot of problems with large acquisitions. There's a top 10 list that goes to the Appropriations Committee. You guys got an updated report yesterday. We need to fix those large projects. There's a lot of opportunity there. The legacy side of things, not just acquisitions, but swapping out these old legacy, where we have a lot of data conversion, application conversion, that's where USDS could really help the Federal Government.

Our concern, these groups, if done right, make a lot of sense. We want to make sure they are transparent; they demonstrate value; and we have cost recovery taken care of with GSA; and then, with USDS, that it's consistent with what we're trying to do with the CIOs.

Mr. CONNOLLY. Under FITARA?

Ms. CHROUSOS. Under FITARA, correct.

Mr. CONNOLLY. I'll come back to that. Mr. Hodgkin's, do you accept that explanation from the private sector point of view, that this is sort of a bit of a carve out. It's not a direct threat. Not intended that way. And it's to give us some more, you know, fast response time capability within the Federal Government with some kind of presumably limited scope?

Mr. HODGKINS. I think that to some degree I agree with that answer, although I would share that many of our members continue to, again, because of the opaqueness of the operations, they're not entirely clear that this isn't directly competing with activities that they believe they can deliver. And as I referenced in my testimony, there's a great degree of frustration about the narrative of brining in new companies because we want innovation.

Our members are frustrated because they feel that the government-unique acquisition process has tamped down their ability to deliver that innovation rapidly in agile ways. They do that for their commercial customers. They have those that are government-unique, or solely in the government space, have counterparts in the commercial marketplace who do that, and so to my point in my testimony about unshackling the Federal Government industrial base, those companies believe that they can also deliver capabilities to the government market in the ways that these entities are doing it.

Mr. CONNOLLY. So do you see it as direct competition, or at least down the road?

Mr. HODGKINS. I think that we have to figure out how to break these molds that are out there. That we, you know—for some of them are decades old, and I think this is a great way to start doing that. But I think we also have to spend a lot of time and attention on taking the best practices they create and translating that, because as I've noted, a lot of what they've done has been to help frame frankly relatively smaller projects.

There has not been necessarily the attention to the really big projects which we believe the kinds of 56-year-old systems this committee exposed are also going to end up being. They're going to take some time, and they're going to take some resources. And we

have to figure out how to take the good work that these groups are doing in bringing in those capabilities and then translate that into that scale we need.

Mr. CONNOLLY. Ironically apparently we have mastered how to maintain such 56-year-old systems in the Federal Government. We just don't know how to replace them, so we're going to need help from the private sector, no question.

Mr. Dickerson, Mr. Powner in his testimony said, or raised a concern, that the lack of clearly defined roles between CIO's that we're trying to strengthen, streamline the decisionmaking under FITARA legislation, and digital service teams, actually may be inconsistent with the intent of the law under FITARA. Could you respond?

Mr. DICKERSON. I appreciate the opportunity to clarify that. I believe that all of the USDS activity is completely in compliance with both the spirit and the letter of FITARA.

Mr. CONNOLLY. Well, you're going to have to do better than that. Yes. Yes, officer I believe I was completely in compliance with speeding laws, even though you have stopped me. GAO thinks otherwise or has at least suggested it could be a concern.

I'm asking you, are you aware of that concern, and besides just defending USDS, what are you doing to ensure that you, in fact, are in compliance with the terms of what is now the law, FITARA.

Mr. DICKERSON. May I have a minute to respond?

Mr. CONNOLLY. Of course. With the consent of the chair.

Mr. DICKERSON. Yes, you're right. There are important oversight and control mechanisms imbedded in FITARA, such as a significant role for the CIO in making decisions that affect IT at the agency.

The CIO is always part of the set of agency leadership that we talk to before we embark on, or go into, a project and decide how to execute it. We operate completely within the authority to operate, or ATO mechanism, and also the CIOs retain the control over the contract decisions, which is specified by FITARA.

Mr. CONNOLLY. My time is up, Mr. Chairman, but I hope we get to pursue that just a little bit more.

Mr. HURD. Mr. Powner, do you have any comments on that last question?

Mr. CONNOLLY. Thank you, Mr. Chairman.

Mr. POWNER. I do think, the reason we raised the concern is we talked to four CIOs where there were digital service teams established. DHS, we felt pretty good about that; DOD and VA, fairly good. State Department, the CIO told us initially that they were not involved with the selection nor the projects being chosen at that agency. We don't think that's appropriate. They ought to be working with each other in that situation.

Now, since the State Department kind of backed off of their initial comments, but when you read our report, that's an issue, and the question is how many of those departments and agencies, we just want to make sure we're in sync. We actually think that if the digital service teams at the agencies coordinate with the CIOs, they're going to be welcomed more into those agencies to work on the big problems and everything.

As an example, at DOD, Terry Halvorson—the travel system at the Department of Defense has been a mess for years. We haven't

been able to deliver on it. So he said, yeah, I want the digital service team to try to tackle that. That's great. They agree on what they're working on, and they agree that that's a priority system that we've had a lot of problems, and that's where Mr. Dickerson can really help move the ball forward with those troubled projects. We just need to tighten it up a little more.

Mr. HURD. Thank you, sir. I'd like to now recognize the distinguished gentleman and scholar from North Carolina, my friend, Mr. Walker, for 5 minutes of questions.

Mr. WALKER. Thank you, Mr. Chairman. I appreciate that. I think I'm going to stay right here on this line of questioning. I had another area I wanted to go to. If I have time, I'll come back to that. I want to dig it just a little bit deeper. Mr. Powner, are the charters being established between USDS and Federal agencies accounting for the role agencies, the CIOs, are required to perform pursuant to FITARA?

Mr. POWNER. We think that those charters could be clearer in terms of the relationship with the CIOs.

Mr. WALKER. When you say they could be clearer, can you be just a touch more descriptive or specific for me.

Mr. POWNER. Yes. So if you say that we're going to establish a digital service team that reports to the agency head or the dep secretary and that will also work in conjunction with the CIO, and those teams will be established consistent with FITARA. That's what I'd like to see.

Mr. WALKER. Okay. What role would the CIO play in coordinating with the USDS and the OMB to establish the agency digital service teams?

Mr. POWNER. I think when you—clearly these CIOs, they should know what the priority acquisitions and the priority legacy conversions are. In working with those CIOs, the most important problems they have, they should be working with these digital service teams so the digital service teams can help them solve the most complex things.

These guys are pretty smart that have come in. Okay? Mr. Dickerson knows how to fix problems clearly. We want to focus on the big problems that we have in this government because there's a lot of them in the IT world.

Mr. WALKER. Sure. Absolutely. Who is responsible for making sure these CIOs know? You said they should know. Who is responsible? Whose job is it to make sure that's communicated?

Mr. POWNER. Well I think the CIO's. Clearly Tony Scott plays a role in that as the Federal CIO. But when you look at what we're doing with FITARA, if the CIO is to capture all IT spending in a department and then be responsible for the execution of this spending, that would include what we're doing with the digital service teams.

That's under the umbrella. That's what we're trying to fix with FITARA, that there's not a lot of rogue operations going on, and I'm not saying we know that's happening with other services that are being acquired at agencies. We want to get our arms around the IT spent, and we want to get the appropriate governance over there so we've got the right security and the right delivery.

Mr. WALKER. All right. So when a USDS team comes into an agency, who do they report to; CIO, Mr. Dickerson, Tony Scott, someone else? Who is it?

Mr. POWNER. I think there are multiple options that could work. I mean, you could actually have them, you want to elevate their position, have them report to the dep secretary, fine. But we got some CIOs that don't report to the dep secretary. So I don't think that would be appropriate. As long as they're both reporting at least equally, or there's multiple arrangements that could work. We just don't want to have, we don't want to undermine the authority of the CIOs.

Mr. WALKER. All right. I appreciate your frankness on that. Mr. Dickerson, you touched on this a little bit earlier, and I want to get back to it if I have time here. Do you think the charters adequately account for the laws established by FITARA?

Mr. DICKERSON. Our charters have evolved over time as we are learning how best to document and set up these teams. I completely embrace Mr. Powner's recommendation that we make it more clear and explicit going forward. Our later charters, as noted in the GAO report, are more explicit about that we interact with the CIOs on a day-to-day basis.

Mr. WALKER. Okay. GSA funds 18F through Acquisition Services Fund, which operates on the revenue generated from the GSA's business units and not appropriations from Congress. Either Ms. Chrousos or Ms. Powner, can you give me a list of these business units?

Ms. CHROUSOS. At GSA, sir?

Mr. WALKER. Yes.

Ms. CHROUSOS. Business units include the business units under the Federal Acquisition Service, like ITS and GSS. It also includes 18F.

Mr. WALKER. Okay. Annually can you tell me how much these units produce for the ASF?

Ms. CHROUSOS. I can only tell you the numbers for 18F unfortunately, but I can work with your staff to get you that information.

Mr. WALKER. And maybe a couple weeks, can you have it, as long as there's nothing else happens in your life?

Ms. CHROUSOS. Yes. I will work with your staff to make sure we get it to you in time.

Mr. WALKER. Fair enough. What are the statutory authorizations to collect such revenue outside of the appropriations process? That's something, we talk about the incredible expansion in the last 2 years, something obviously as the American people see more and more bureaucracy expanding, so from an accountability standpoint, somebody explain to me, Ms. Chrousos, Mr. Powner, the statutory authorization to collect this revenue.

Ms. CHROUSOS. Well, GSA's mission is to provide the best value in real estate acquisitions and technology, and GSA uses this reimbursable fund to invest in programs that can support that mission and ultimately can support agencies in their mission.

Mr. WALKER. Okay. I've got 20-something seconds. Let me ask you this way. Do you think it's intentional to have this revenue placed outside of congressional jurisdiction, control and oversight? Is it intentional, or why is it?

Ms. CHROUSOS. I don't believe it's intentional. I don't believe it's intentional.

Mr. WALKER. Then what do you think it is?

Ms. CHROUSOS. I'm sorry. I'm not familiar with the origins of the fund. I'm just familiar with my own finances. I apologize. If you have an answer?

Mr. WALKER. With that, my time is expired, Mr. Chairman. Thank you.

Mr. HURD. The government's messed up. All right? The way we buy IT goods and services is messed up. We have difficulty getting smart people that have the technical skills to solve the problems of the future is difficult. And what I think should ultimately be happening is everybody that's sitting at this table right now, you all should be holding hands and working together, because you all ultimately have the same goal.

Because the only way that we are going to get a digital infrastructure within the Federal Government that is, that the American people deserve, is if we break some things on the inside, all right, and that we utilize the talents of the private sector as well.

But the mentality of, the startup mentality in the Federal Government where it comes to disruption it is important, but the Federal Government doesn't have the appetite for the level of risk that the startup community has or the venture world has, all right. And so that's the one thing that doesn't transfer between, you know, with that narrative. And we have a responsibility to all of our constituents, which is the American people, that we're using their money wisely and smartly. I think these programs conceptually are great programs.

And my first question, and maybe we start with you, Mr. Dickerson, how do you decide what projects you work on?

Mr. DICKERSON. It's a very complex process. I will try to make it brief. I spend a tremendous amount of time, and my other members of the leadership team spend a tremendous amount of time gathering information from all over the government. The agency leadership, stakeholders everywhere——

Mr. HURD. Can I make a suggestion? That work is already being done. There's a GAO high-risk report. That high-risk report identifies some of the key projects that are a billion dollars or more that are having issues. All right?

Under FITARA, we have established a number of areas. Data center consolidation, something as simple as that. We have seen four agencies realize $2 billion in savings. You know, a man and a team of your talents would go a long way.

The CISO of the Social Security Administration needs a whole lot of help, all right, and this is an entity, they should be able to say, hey, when they get grilled here at this committee about not following some of the basic practices of good digital system hygiene, they should be able to reach out to you, or you all should be able to call them the next day.

Is that concept, is that not—grade my paper. Does that make sense? Is that, you know, the flexibility and the way that you all could be used?

Mr. DICKERSON. As you say, the OMB and the office of the Federal CIO conduct broad portfolio oversight of all those programs

across the entire government, and we absolutely rely on that information as much as we can.

Mr. HURD. There's nobody in the Federal Government that understands this better than Tony Scott, all right, and Tony Scott knows where the problems are and should be able to direct you all.

But when I look at some of the lists of, you know, successes, as somebody said earlier, these aren't the tectonic changes that we likely need in order to see our government get into the current century, let alone the next century. All right? Ms. Chrousos, do you have an opinion.

Ms. CHROUSOS. About our prioritization process?

Mr. HURD. Uh-huh.

Ms. CHROUSOS. 18F is a demand-driven, fee-for-service organization. So our prioritization process uses a prioritization rubric that looks at both impact and viability, but we cannot parachute in, or we cannot kind of pull in customers. They have to come to us and want to work with us. When we look, when things come into our organization, we look at impact, which for us is number of people it impacts as well as potential cost savings, and then we look at viability. For example, is this something better done by the private sector? Is this something that we have the talent for? Is it something we should send to the Federal Acquisition Service or back to that agency's CIO? That's how we prioritize.

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

Mr. HURD. I would.

Mr. CONNOLLY. Just by way of followup to your point, but, Ms. Chrousos, okay, great, and Mr. Dickerson. But the chairman was asking, but we already have a list of very high priorities, from GAO's high-risk list, and some of the priorities we set out in FITARA. Do you also look at those priorities as you're looking at the projects you're going to get involved in?

Ms. CHROUSOS. The projects that we get involved in are usually small reference products, like Mr. Hodgkins referred to, that showcase modern methodologies to agencies, and then they go and procure a larger team to actually tackle the big problems. So we don't look necessarily at that GAO high-priority list. We don't believe that's our function.

Mr. CONNOLLY. Thank you, Mr. Chairman.

Mr. HURD. Let's talk a little bit about IT procurement. IT procurement is something I've spent a lot of time talking about. And I've said on a number of occasions IT procurement is not a sexy topic.

IT procurement, you're not going to hold a rally for IT procurement or a parade. However, you know, this agile delivery service, blanket purchase agreement concept is a concept that I think could change this, right? And if we fix this, Ms. Chrousos, I will hold a parade on IT procurement, and you will be the grand marshal.

But can you please expand on this agile delivery service and its use of blanket purchase agreements with vendors?

Ms. CHROUSOS. Yes. If you had told me as well that IT procurement was something I'd be passionate about 2 years ago, I would have told you you were crazy.

Mr. HURD. Ms. Chrousos could you move this closer——

Ms. CHROUSOS. Oh sorry. But I personally believe it's the single most impactful way to impact what we're trying to do in the government and to move the government forward in technology.

The Agile Blanket Purchase Agreement shows a lot of promise because for me it shows what happens in terms of breaking down some of the procurement barriers that Mr. LeDuc and Mr. Hodgkins spoke of, when you put an engineer next to a contracting officer and you let them speak and you let them get their minds together. We took engineers from 18F and contracting officers from the Federal Acquisition Services, and we put them together, and we gave them a problem. Can you find us a way to access really innovative, modern technical talent? And they said, yes, if we look at this and say, instead of asking for pages and pages of documentation and past history, but instead we ask businesses to submit live code in an open hub repository and then we have engineers look at that code and assess it, we'll be able to get to better talent.

Mr. HURD. So take us through how you choose the vendors. How many vendors are there, and how does 18F work with agencies to choose one of these vendors?

Ms. CHROUSOS. The blanket purchase agreement is like a preselection of vendors, so we work with engineers and contracting officers to go through the documentation the way that you would with any procurement vehicle. That vehicle, you can then put task orders against that vehicle. Right now agents, we can access the Agile Blanket Purchase Agreement. We actually issued a task order this week to a small business, and agencies can use the Federal Acquisition Service to access this same blanket purchase agreement.

Mr. HURD. Mr. Powner, does this exist in other parts of the Federal government? Is this unique? Look, the VA would benefit from this ability. I'm sure the organizations that are part of Mr. Hodgkins' and Mr. LeDuc's association would love to be able to participate in these things. Your opinion on this?

Mr. POWNER. So clearly, I think, you know, this is tied to FITARA, to your grades on incremental development. Agile is one way of going really small. Right? These vehicles if done right and were inclusive of the people who should be doing this, I think could really work. I mean, talking about shock the system, we need more agile development. This could actually help a lot.

I actually think, and I've said this at times on incremental development, I think Congress and OMB, if you want to fix this big bang waterfall approach, don't fund anything unless you deliver within the year, and have a waive-out process. You know what; that would change a lot. You're not going to get funding either through the OMB process or through the appropriation process. We talked to appropriation committees about this. If you want to really fix it, if you want to go small fix it, that's the way you would do it. This would help.

Mr. HURD. Ms. Chrousos, if all of the agencies that had a D or an F on the agile development, within our FITARA score card, came to you and said, hey, help us figure out how to do this, is that a project that you all would take on?

Ms. CHROUSOS. I believe so. We have been asked by other agencies to help them build out their own Agile Blanket Purchase

Agreements. We're not trying to hoard that information. Our documentation is actually out in the public on GitHub, so you can build your own agile BPA at your agency if you so desire, or you can come through our organization. And that's something we welcome.

Mr. HURD. I hope all the CIOs that got a D or an F on their FITARA score card in this area are hitting that Web site as we speak. I have gone over my time. I know Mr. Farenthold has additional questions. The gentleman from Texas is recognized for 5 minutes.

Mr. FARENTHOLD. Thank you, Mr. Chairman. I want to follow up on the blanket purchase agreement. Can you tell me just in broad general, what type of services are these? I mean, you've got 17 vendors. What type of services?

Ms. CHROUSOS. Seventeen vendors is for one of the pools. We're authorizing two more pools. And software development, DevOps, our key design thinkers, those types of thinkers that can work on agile development, user-centered products.

Mr. FARENTHOLD. All right. So how does this help and not create another barrier? So I'm a software developer, I want to build a, I don't know, make it simple, an app for the phone to tap into some Federal agency. Is getting certified through that, how does that help me and how does that not create another barrier to entry?

Ms. CHROUSOS. We're trying to create smarter bridges between the government and the private sector by putting engineers and contractors together. We just think this is a smarter bridge. We're also at the same time working with the Federal Acquisition Service to try and lower the barriers to entry. We have had a really interesting project with Schedule 70 where we're looking at creating plain language roadmaps and lowering the time it takes at Schedule 70 significantly.

Mr. FARENTHOLD. All right. So Mr. Hodgkins, is this helping your members, or is this just another hurdle?

Mr. HODGKINS. Thank you for the question. We're supportive of the agile development approach. One of the challenges that we think of this particular BPA is that it's only accepting applications of companies who are willing to code in open source. So all of the companies who have intellectual property in their products are not eligible to compete on this particular BPA, and so they're not offering their solutions in an agile fashion, and that's something we think that, you know, we can open that up.

Mr. FARENTHOLD. I'm a huge advocate for open source. I actually do think that's the way the government can address some security issues as well as make stuff available across government lines. You also talked, though, about unique government needs. What are the unique government needs that the private sector doesn't have? You need good user interface. You need good price. You need good security. What are the unique government needs?

Mr. HODGKINS. The government has a lot of unique needs in scale. It has a lot of unique needs in compliance, and it has a lot of unique needs regarding the way the company is expected to operate and shape its business model.

Mr. FARENTHOLD. Ms. Chrousos, do you want to talk about what unique government needs are as well are? Because I think they're not as unique as people want to make them to be, other than size.

Ms. CHROUSOS. I don't think the government's needs are that unique, and I actually don't think agency's needs or subagency's needs are necessarily that unique as well. I think if you look across, and we have been trying to see patterns coming in of incoming requests.

We see patterns of common technical components that are needed throughout government. It's an area that we should have smart people looking at and looking at how to leverage efficiencies.

Mr. FARENTHOLD. I mean, that's traditionally the GSA's role, is to take advantage of the size of government to make things cheaper. Having used the TSA Web site, I don't know.

Is there a way to expand something like these blanket purchase agreements to say, all right, this is certified and secure so we don't have every CIO doing the same evaluations of very similar software or the same needs in software.

Ms. CHROUSOS. I believe so. We're a young organization. We're 2 years old, and this was our first collaboration with the Federal Acquisition Service. One of the reasons we created the Technology Transformation Service is to bring some of these ideas and some of these people together at GSA to do exactly what you're talking about.

Mr. FARENTHOLD. I think that creates a level of expertise and bureaucratic kind of a CYA, oh, this is GSA certified. I don't have to be afraid to buy this and go through a lengthy purchase process. I did have one other. I think it was your group that was working with the census. We had a hearing on the census. Can you talk a little bit about what your role was and what value you feel you provided to the Census Bureau? That's another agency within this committee's direct jurisdiction.

Ms. CHROUSOS. I'm so sorry to disappoint you. I actually don't know enough about that to speak to it today, but I'm happy to get you that information.

Mr. FARENTHOLD. All right. It was just on your list of things, and I would be interested to do that. That's basically all I've got for right now. So I yield back.

Mr. HURD. Gentleman yields back. Mr. Connolly, you're recognized.

Mr. CONNOLLY. Thank you. I want to follow up on just one aspect of, the question of the role of the CIO. Mr. Powner, you gave an example of the State Department CIO not being cognizant or fully aware of what USDS team was doing within the State Department. Is that correct?

Mr. POWNER. That's correct.

Mr. CONNOLLY. Mr. Dickerson, does that make sense from a good management point of view? I mean, in the private sector it's almost inconceivable to me that anyone could hire a private IT team and come in and do some work in the corporation without the CIO's knowledge and approval. I mean, that would be tantamount to saying you might as well move on because we don't have any confidence in you.

How is it possible in the public sector that we're a team, your team in this case, would be operating in an agency without the knowledge or express approval of the CIO?

Mr. DICKERSON. So I believe, Mr. Powner, after making a comment about the State Department CIO also followed up by saying that they brought those comments back a little bit under discussion. I looked into this with my team a little bit, and to the best of my knowledge, the CIO at the State Department was a participant in several meetings in the earlier stages of our work at the State Department. Now that being said, there's absolutely a spectrum among the CIOs that we work with of the amount of time and the interest that they have in the digital service-type projects, given all their other statutory responsibilities.

Mr. CONNOLLY. Well would you agree, and Ms. Chrousos, please comment as well, generally speaking, it's a pretty good management practice to make sure that your team, or your team, is operating with the full knowledge and consent of the CIO?

Mr. DICKERSON. I certainly agree that it's an excellent management practice for the CIO and the rest of the agency leadership to all be aware of what we're doing.

Ms. CHROUSOS. I agree with Mr. Dickerson.

Mr. CONNOLLY. Well, aware of and giving consent?

Mr. DICKERSON. And giving input and consent, yes.

Mr. CONNOLLY. Yeah okay. Ms. Chrousos?

Ms. CHROUSOS. I agree.

Mr. CONNOLLY. Mr. Powner, any last comment on that, because I—remember in FITARA what we're trying to do without doing it by fiat, is we're trying to evolve to a system where there is a hierarchy and that the CIO is empowered to make decisions, and streamline, and monitor procurement, and pull the plug when it goes bad and look at things in more bite-sized manageable pieces and make sure the other things we're talking about, legacy systems, data center consolidation, going to the cloud, trying to tap into the domain expertise of the private sector, where we don't have it in the public sector, all those things are being encouraged.

What we didn't do is say there should be one CIO, but that is clearly, what we're kind of hoping is that there will be one premier CIO, who is aware of what's going on and the various moving parts.

Mr. Powner, final word on that issue.

Mr. POWNER. Well, I think we're heading in the right direction. Look, we know from many of your hearings, we have a few CIO organizations that are a bit dysfunctional. They really don't have the right authorities in the cultures that they grew up in, and there's some agencies where we really need to tighten that up and fix it, so I think there's a lot of wheels here going at the same time. But the long-term solution is fixing the CIO problem.

Mr. CONNOLLY. Yeah. And potentially these two programs can be tools for them actually to strengthen that, but we just don't want to have rogue operations that actually unwittingly detract from the broader goal we're trying to achieve in FITARA. I thank the chair.

Mr. HURD. I would like to recognize Ms. Kelly.

Ms. KELLY. Just quickly, Mr. Dickerson and Ms. Chrousos, what makes your agencies different from each other in funding in the projects you do take on, or what are the differences?

Ms. CHROUSOS. We're a fee-for-service, demand-driven digital consultancy. And as such, we have a separate, very separate intake

and prioritization process. We offer support services. We do view the CIO as our most sophisticated customer. We try and meet their needs by offering support services from the ground up.

Mr. DICKERSON. USDS is not cost recoverable. We operate off of an appropriation from Congress, so we go directly to where we're needed as quickly as possible, which means that we are often useful and best applied in cases where there are unanticipated needs.

Ms. KELLY. Okay. Thank you.

Thank you, Mr. Chairman.

Mr. HURD. Ms. Chrousos, aren't you required to achieve full cost recovery now, and why is it going to take until 2019?

Ms. CHROUSOS. Thank you for the opportunity to answer that question. As the TTS commissioner, this is something I think about and work with my team quite a bit. I work with the 18F management team as well as the CFO, and we look at key performance indicators on a weekly basis to try and iterate the operations of our business to get to full cost recovery.

Mr. HURD. So are you required to have full cost recovery right now?

Ms. CHROUSOS. We're committed, we are required to have a plan for full cost recovery, and we're committed to achieving full cost recovery by 2019.

Mr. HURD. Will you plan on sharing publically 18F's accounting for cost recovery to include cost structures and project charges in instances where 18F came in below expected costs or above?

Ms. CHROUSOS. I'm happy to work with the CFO's office, and as long as that's allowed by GSA, I'm very happy to share that with you.

Mr. HURD. Mr. Powner, is 18F supposed to achieve full cost recovery now?

Mr. POWNER. I believe that there's a requirement for a plan to get there. Obviously we want to do it as soon as possible. I do think that when you have a startup, there is some, you know, you need to build up to it because the payout is actually lagging what they're doing.

Mr. HURD. Is GAO receiving the information that you need in order to determine that they're on a path to full cost recovery?

Mr. POWNER. Yes, we have received that. I think by 2019, that's the plan. I mean, they got a worst case, best case, most likely case. There's some good numbers there, and that is the most likely case to recover by 2019. I think our report says the worst case is around 2022.

Mr. HURD. Good copy. Mr. Dickerson, the USDS is directed to provide quarterly reports to the Committees on Appropriations, in both the House and Senate, describing current USDS teams and projects that include the top ten priority programs. Has that been provided to the Appropriations Committees?

Mr. DICKERSON. Our most recent top ten project report was transmitted yesterday, I believe.

Mr. HURD. Copy. Now, is that the same document that we received, titled Report to Congress, Ten High Priority Programs?

Mr. DICKERSON. That's right.

Mr. HURD. Is that for OMB, or is this directly for USDS?

Mr. DICKERSON. The reporting direction from Congress changed between the last 2 years' appropriations, and so what you're seeing here is kind of the last production under the joint OMB, USDS oversight. So you see some projects that USDS is involved in and some that we are not.

The new direction from Congress with the most recent appropriation is that USDS report on these projects going forward, and that is our plan.

Mr. HURD. Good copy. Do you know what the Joint Legacy Viewer is?

Mr. DICKERSON. In passing familiarity, yes.

Mr. HURD. Is that true interoperability?

Mr. DICKERSON. I think it's an excellent first step. It's certainly a better place to be that you're able to see records from two different systems together in the same place. My understanding is that that is found very valuable by the clinicians that are trying to serve those veterans. There is certainly farther to go. More interoperability would still be better.

Mr. HURD. And what is USDS' role in the interoperability between VA and DOD? I know you mentioned something earlier, but I'd love to hear a little bit more robust answer.

Mr. DICKERSON. It's a very big problem, and we have bitten off some pieces of it that we think we can have a really strong impact on. One of those is the transmission of the service treatment record between the DOD and the VA at the end of a veteran's Active Duty service.

Mr. HURD. Copy. My last question is to everybody, and please answer in like 20 seconds. What is your key takeaway from today?

Mr. Powner, let's start with you. You're the most experienced witness at the table.

Mr. POWNER. Let's continue to fix the CIO problem.

Mr. HURD. Mr. Dickerson?

Mr. DICKERSON. I am very gratified to hear unanimity on the point that 18F and USDS have an important role to play in improving our overall government services. I certainly take away the point that there are many parts to this problem, and all of us have an important role to contribute to it, and I am happy to embrace the recommendations from GAO.

Mr. HURD. Ms. Chrousos?

Ms. CHROUSOS. The key single takeaway is that we cannot do this alone. It's a very ambitious and important goal that we all share between us and that more information sharing is better.

Mr. HURD. Mr. Hodgkins?

Mr. HODGKINS. Thank you, again, Mr. Chairman, for letting us be here.

The takeaway for us is that we support these programs. It's good to hear they are on a good trajectory. We want to keep them that way so that these activities can be sustained into the next administration, but this is a big problem, and they are part of a solution, but they are not the whole solution.

Mr. HURD. Mr. LeDuc, you get the last word.

Mr. LEDUC. We're delighted that these subcommittees are committed to their oversight role. We're very happy about this hearing today. We're delight that GAO has done a very thorough review in

their work, and we believe that combined these two things together, can really help to focus 18F and USDS.

Mr. HURD. I'd like to thank our witnesses, especially Mr. Dickerson and Ms. Chrousos. You all are testifying for the first time before Congress. I appreciate all you all taking time to appear before us today. If there's no further business, without objection, the subcommittees stand adjourned.

[Whereupon, at 11:04 a.m., the subcommittees were adjourned.]

APPENDIX

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Material Submitted for the Hearing Record

July 13, 2016

Ms. Phaedra S. Chrousos
Commissioner
Technology Transformation Service
U.S. General Services Administration

Hearing Follow-up

1) Congressman Walberg -- What's the average tenure of the employees working at 18F?

18F's employees are hired for a 2-year term, with the ability to have their term extended for an additional (not to exceed) 2-years.

Since 18F has been in existence for just over 2 years (18F started in March 2014), many of the longest-serving employees have just hit, or are just coming up on, their initial 2-year term expiration. Of all 18F employees hired from 2014 to date, the average tenure is 12 months.

We will continue measuring these numbers for updates and trends.

2) Congressman Farenthold -- Please provide more details on 18F's work with Census, and what value 18F brought to their IT issues.

18F has provided technical expertise, mentorship, and code enhancements to the Primus team. Primus is the Census-built version of the citizen-facing component of the 2020 Internet data collection application.

Specifically, 18F partnered with the Primus team to enhance the application using technical best practices in a variety of areas.

Improvements to the maintainability of the code:

- Code and design optimizations.

- Redesigning the server side code structure to make future changes easier.

- Streamlining the initialization process to improve restart times.

- Doubling the number of automated tests to provide confidence new bugs would not be introduced when future code changes are made.

- Improving security by centralizing access controls into easily maintainable modules.

- Breaking status monitoring tools into smaller, more easily maintainable modules.

- Working with the Primus team on how to write more comprehensive automated tests to prevent, catch, and eliminate bugs.

- Reduced time and complexity of initializing new development environments that mirror the production environment, reducing likelihood of bugs making it into final deployments.

18F helped to make Primus deployable in flexible cloud environments by:

- Adding support for twelve-factor portability to eliminate possibility of human error during deployments.

- Greatly increasing the testability of the application on different database technologies, allowing us to quickly and easily determine which technology will give us the best performance.

- Reworking the database migration and deploy processes to follow faster and safer rollback practices if a database error occurs.

- Creating an automated AWS deployment of Primus and corresponding informational videos

In addition, 18F is beginning work on a project with Census to demonstrate the ability to use modern cloud infrastructure and open source tools to support big data/ data science projects.

Questions for Mr. Mikey Dickerson
Administrator
United States Digital Service

Questions from Chairman Will Hurd

June 10, 2016, Hearing: *"18F and U.S. Digital Service Oversight"*

1. Please provide a list and a description of each project US Digital Service (USDS) has worked on, in any capacity, that is related to the Office of Management and Budget's list of top ten highest priority IT investment projects. For each project please include details of the services provided, when USDS services began, and indicate if USDS services are completed or, if they are ongoing, the anticipated date of completion.

Agency	Program	Start	Significant USDS Involvement
Department of Education	Federal Student Aid Systems (FSA)	2015	Ongoing
Department of Health and Human Services	HealthCare.gov • HealthCare / Web Portal and Support • HealthCare Website Development	2014	Complete
Department of Homeland Security	U.S. Citizenship and Immigration Services (USCIS) Transformation	2014	Ongoing
Department of State	Consular Systems Modernization (CSM)	2015	Ongoing
Department of Veterans Affairs	Electronic Health Records (EHR) Veterans Health Information Systems and Technology Architecture (VistA)	2015	Complete

Please see the Office of Management and Budget's report to Congress "Top Ten High Priority Programs" submitted on June 9, 2016 for additional information on each of these projects.

2. The Department of Veterans Affairs (VA) accounts for three of the top ten high priority IT projects at the federal government identified by the Office of Management and Budget. Please provide a list and a description of each project USDS has performed at the VA. For each project please include details of the services provided, when USDS service began, and indicate if USDS services are completed or, if they are ongoing, the

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anticipated date of completion.

Agency	Program	Start	Significant USDS Involvement
Department of Veterans Affairs	Electronic Health Records (EHR) Veterans Health Information Systems and Technology Architecture (VistA)	2015	Ongoing
Department of Veterans Affairs	Streamlining VA Disability Claim Processing	2015	Ongoing
Department of Veterans Affairs	Simplifying Veteran-facing services with Vets.gov	2015	Ongoing

Please see the Office of Management and Budget's report to Congress "Top Ten High Priority Programs" submitted on June 9, 2016 for additional information on Electronic Health Records (EHR) Veterans Health Information Systems and Technology Architecture (VistA). At a high level, the U.S. Digital Service at VA (DSVA) has worked closely with the Board of Veterans' Appeals to develop a new system that tracks and processes paperless appeals, called Caseflow. In addition, in November 2015, the VA launched vets.gov: a new way for Veterans to discover, apply for, track, and manage their benefits. Design and development of vets.gov is led by the DSVA.

    a. Please describe the role the VA's Chief Information Officer has in management and oversight of the USDS team.

As with all CIOs, the VA CIO is an important stakeholder in establishing the digital service team and its continued effectiveness. The CIO of the VA has a significant role in the decision process for planning, programming, budgeting, and execution decisions, related to reporting requirements and reports related to information technology; and the management, governance, and oversight processes related to information technology.

3. Please provide a list and a description of each project USDS has performed at the Census Bureau. For each project please include details of the services provided, when USDS service began, and indicate if USDS services are completed or, if they are ongoing, the anticipated date of completion.

In 2015, the USDS team, together with the General Service Administration's 18F team, engaged with the technical leadership at Census on the acquisition strategic plan related to several digital services components that will be included in the 2020 decennial census. The USDS engagement on this project is complete.

4. Products in use by the federal government must be compliant with federal security standards. What is the process USDS follows to ensure the products developed by USDS

are compliant with these security standards? Has USDS ever requested waivers to any federal security standards?

USDS develops products in partnership with federal agencies in accordance with agencies' existing processes and procedures. Such products must comply with the federal security standards required by the Federal Information Security Modernization Act of 2014 (FISMA), and USDS has not requested a waiver of these security standards.

5. Does USDS envision its role as being an entity that fixes single, identifiable IT problems at an agency or helping agency IT personnel learn how to manage and fix their IT problems themselves?

   The USDS has seen success principally when:

   - *The USDS team is small, and focused on a high priority project.*
   - *Agency leadership is engaged and supportive.*
   - *The USDS team is tightly integrated with existing contractors and career staff.*
   - *The project has a hard deadline.*
   - *The project may have cross-agency dependencies, or many stakeholders across the government.*

   The USDS therefore generally focuses on well-defined, high priority projects.

6. Are USDS service teams envisioned to be a permanent presence at certain federal agencies? If so, which agencies?

   Today, the USDS has charters established with the Departments of Veterans Affairs, State, Homeland Security, Health and Human Services, Defense, Justice; and the Department of the Treasury. We anticipate being able to provide project support at each of these agencies and will continue to assess need for support.

7. When a digital service team is working with an agency, who has management responsibility over that team? What is the minimum level of CIO responsibility and involvement established in the charters agencies' sign before working with USDS?

   Once the USDS has established a charter with a particular agency, the charter specifies immediate supervisory authority over the relevant digital service team, which is typically at the Deputy Secretary level. The CIO of an agency is always an important stakeholder in establishing a digital service team and its continued effectiveness. The USDS's partner agency CIOs have a significant role in the decision process for planning, programming, budgeting, and execution decisions, related to reporting requirements and reports related to information technology; and the management, governance, and oversight processes related to information technology.

8. What is USDS's organizational approach to the "buy don't build" approach to addressing IT problems at federal agencies?

The USDS is working on modernizing procurement processes and practices for the digital era. For example, the USDS has developed training programs and tools to enable federal contracting officers to apply industry best practices to digital procurements, and serve as expert advisors to their CIOs on procurements. Improving procurement processes and practices with our partners in the IT contracting community will remain a critical element of modernizing our government, as skilled contractors will continue to deliver the majority of the government's digital services, just as they do today.

Questions for Mr. David Shive
Acting Commissioner, Technology Transformation
Service General Services Administration

Questions from Chairman Will Hurd
June 10, 2016, Hearing:
"18F and U S. Digital Service Oversight"

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1. **Please provide a list and a description of each project 18F has worked on, in any capacity, that is related to the Office of Management and Budget's list of top ten highest priority IT investment projects. For each project please include details of the services provided, when 18F services began, and indicate when 18F's services were completed or, if they are ongoing, the anticipated date of completion.**

   - **Census 2020**
     - ○ Census Digital Transformation
       - ▪ Status: Ongoing
       - ▪ Period of Performance: 10/7/2015-9/25/2016
       - ▪ Details of Service: 18F has provided technical expertise, mentorship, and code enhancements to the Census team working on Primus, which is the Census-built version of the citizen-facing component of the 2020 Internet data collection application.

   - **Department of Homeland Security, U.S. Citizenship and Immigration Services (USCIS) Transformation**
     - ○ MyUSCIS
       - ▪ Status: Completed
       - ▪ Period of Performance: 5/1/2015-4/30/2016
       - ▪ Details of Service: MyUSCIS helps users more easily navigate the immigration process. 18F helped to reimagine and modernize immigration and visa processes by building tools that improve the applicant process, providing clear and simple information to the public, and creating new tools that make the processing of immigration forms faster and more efficient.
     - ○ USCIS Identity, Credentialing, and Access Management (ICAM) Development
       - ▪ Status: Completed
       - ▪ Period of Performance: 7/8/2014-5/1/2015
       - ▪ Details of Service: USCIS Public ICAM is a login and identity-verification system for people wanting to interact with

USCIS. Built with industry-standard tools and using modern practices, it uses USCIS and the State Department's own information to verify immigrants' identities. Currently and primarily serving immigrants renewing their Green Cards, the system has over half a million users. 18F was called in to partner with USCIS on the development of the system to ensure the timely launch the project, allowing hundreds of thousands of immigrants the ability to renew their Green Card online.

- USCIS Infrastructure as a Service (three total IAAs for this project)
  - Status: Completed
  - Period of Performance: 5/1/2015-6/12/16
  - Details of Service: Provided access to, and consolidated billing for, infrastructure services, platform services, and software services and other tools that may be labeled generally as being part of "cloud services."

- **Department of Veterans Affairs (VA) Veterans Benefits Management System (VBMS)**
  - Veterans Affairs VBMS Software Development Kit
    - Status: Completed
    - Period of Performance: 7/22/2015-7/20/2016
    - Details of Service: VA engaged 18F to build one or more Ruby "gems" to interface with the existing VBMS Application Programming Interface (APIs). Ruby is a computer programming language. A Ruby gem is a self-contained Ruby program that can be easily reused and redistributed. The requested gem provides a single point of communication with the three VBMS services in order to streamline the development process of creating applications that process veterans' benefits claims. Such applications retrieve and store documents related to specific disability claims, and perform other related business processes related to claims, such as moving a claim to appeals.

- **Social Security Administration, Disability Case Processing System (DCPS)**
  - Disability Case Processing System Agile Acquisition Consulting
    - Status: Completed
    - Period of Performance: 10/27/2014-9/30/2015
    - Details of Service: 18F provided agile coaching and acquisition consulting services to support the DCPS program's transition from waterfall to agile practices. We conducted agile training sessions, delivered an assessment of the overall program and provided recommendations for maturing program and product delivery, and produced an

agile solicitation in alignment with those recommendations.

2. **The Department of Veterans Affairs accounts for 3 of the top 10. Please provide a list and a description of each project 18F has worked on at the Department of Veterans Affairs. For each project please include details of the services provided, when 18F services began, and indicate when 18F's services were completed or, if they are ongoing, the anticipated date of completion.**

   - Veterans Affairs VBMS Software Development Kit
     - Status: Completed
     - Period of Performance: 7/22/2015-7/20/2016
     - Details of Service: VA is engaging 18F to build one or more Ruby "gems" to interface with the existing VBMS Application Programming Interface (APIs). Ruby is a computer programming language. A Ruby gem is a self-contained Ruby program that can be easily reused and redistributed. The requested gem provides a single point of communication with the three VBMS services in order to streamline the development process of creating applications that process veterans' benefits claims. Such applications retrieve and store documents related to specific disability claims, and perform other business processes related to claims, such as moving a claim to appeals.

   - Veterans Affairs Cloud Migration
     - Status: Ongoing
     - Period of Performance: 8/31/15-8/30/16
     - Details of Service: 18F provides Infrastructure as a Service (IaaS) cloud computing and engineering support for the creation and launch of Veterans.gov. 18F provided the procurement vehicle to allow VA to migrate to a commercially provided IaaS vendor.

3. **Please provide a list and a description of each project 18F has worked on at the Census Bureau. For each project please include details of the services provided, when 18F services began, and indicate when 18F's services were completed or, if they are ongoing, the anticipated date of completion.**

   - Census Digital Transformation
     - Status: Ongoing
     - Period of Performance: 10/7/2015-9/25/2016
     - Details of Service: 18F has provided technical expertise, mentorship, and code enhancements to the Census team

working on Primus, which is the Census-built version of the citizen-facing component of the 2020 Internet data collection application.

4. Does 18F envision its role as being an entity that fixes single, identifiable IT problems at an agency or helping agency IT personnel learn how to manage and fix their IT problems themselves?

Over the last two and a half years, 18F has grown from a small team focused on building prototypes and web services to an organization with five business units:

- **Custom Partner Solutions.** Provides agencies with custom application solutions.
- **Products and Platforms.** Provides agencies with access to tools that address common Government-wide needs.
- **Transformation Services.** Aims to improve how agencies acquire and manage IT by providing them with consulting services, to include new management models, modern software development practices, and hiring processes.
- **Acquisition Services.** Provides acquisition services and solutions to support digital service delivery, including access to vendors specializing in agile software development, and consultations on developing requests for proposals.
- **Learn.** Provides agencies with education, workshops, outreach, and communication tools on developing and managing digital services.

18F's ultimate goal is to transform the way the government builds, buys, and shares digital services. We accomplish this mission by providing teams of digital services experts (designers, engineers, researchers, product specialists) using modern methodologies (agile software development, developer operations practices, user-centered design) to help agency customers rethink the way they deliver services online.

Our end goal of transformation ensures that the focus isn't solely on creating or buying software, but rather delivering a solution in partnership with an agency that meets the needs of the user first and leaves that transformation capability behind at the agency. It is imperative that we work hand-in-hand with our customer agencies so that we ensure modern methods are learned by our customers, not simply bought. We will continue to adapt to our customers' needs, and look forward to a future where all agencies work in the manner that delivers the best quality results for the public: in the open, putting users first throughout the development cycle, and iteratively in short cycles to minimize risk.

5. Why did 18F choose to build cloud.gov, a Platform as a Service (PaaS)

rather than pursuing an existing, open source, commercially available PaaS solution?

Cloud.gov does use an existing, open source, and commercially available PaaS solution. 18F customized a mature open source PaaS, called Cloud Foundry, and is deploying it on our commercial Infrastructure as a Service (IaaS) provider, in this case, Amazon Web Services.

As 18F matured, we found that we needed a PaaS that would serve the extensive compliance requirements of Federal teams. We took the Cloud Foundry project and built onto it to fit the specific needs of Federal technology development and procurement.

The core goal of cloud.gov is to radically reduce the time and labor it takes for Federal teams to gain Authority To Operate (ATO) for applications. Cloud.gov is an open-source project that other commercial providers can borrow from and reuse.

    a. **Is the cloud.gov service FedRamp compliant?**

    Cloud.gov is going through the FedRAMP compliance evaluation process. We received "FedRAMP Ready" status in May 2016, and we hope to receive FedRAMP Joint Authorization Board (JAB) Provisional Authority to Operate (P-ATO) in November 2016.

6. **Ms. Chrousos testified that 18F has one service line that builds prototypes and light web services, but this service does not compete with the private sector. Rather the service is a means to showcase modern methodologies and practices to agencies. What process does 18F follow in order to determine when 18F should build a service and when the service should be purchased from a private sector service provider?**

18F is committed to delivering solutions that best meet the needs of our agency customers' user base. The first step in evaluating a partner's needs is a thorough exploration of the challenges facing the agency and their users. This period of "discovery" generally entails getting to know the end users, better understanding stakeholder needs, and honing in on what problem we can help solve. Often times it is clear from the outset that our acquisitions unit will help the agency rethink what is needed in a procurement, and help draft a modern, modular-based procurement request. Sometimes, the result of this discovery process determines the need for custom software. When this is the case, the evaluation team first considers any low-cost buy options, then considers the reuse of open-source code. If these options do not exist, the team considers the creation of custom software. As Federal employees ourselves, we recognize the value in not creating custom software for challenges easily solved with a

commercially available option.

7. **The Federal Information Security Management Act (FISMA) requires agencies to assess the effectiveness of their information security controls and OMB Circular A-130 requires that agencies assess and authorize their systems before placing such systems in an operating environment. This end result of this process is typically for an IT system to receive an Authority to Operate (ATO). Does 18F have current ATOs in place for its IT systems? What is the process for 18F ATOs?**

18F does not currently have ATOs for all of their systems. There are known shortcomings in the coordination of the ATO process between GSA IT and 18F, and we are working next steps to resolve any gaps. GSA IT and 18F are currently coordinating so that 18F is following the overarching agency guidance, GSA IT Security Procedural Guide 06-30[1], to receive ATOs. Additionally, TTS is appointing an infrastructure lead that will manage the technical strategy for the organization, in accordance with GSA technology policies. This includes coordinating ATOs with the Office of the Chief Information Security Officer within GSA IT.

8. **When I8F acquires free open source software, what process or security protocols/updates are implemented to ensure the software is secure?**

When 18F acquires external software for use in processing agency data or production data, it is subject to security review by 18F and GSA IT during the Authority to Operate process, whether open source or proprietary in nature. While the software 18F produces itself is almost entirely open source, 18F acquires a mix of free open-source software and proprietary software to accomplish its mission. Because software being open source does not carry any inherent security risks in comparison to proprietary software, it is treated identically during security reviews.

   a. **Does I8F consider costs of modifying the free open source to ensure it is compliant with all applicable security standards?**

   Yes, 18F does consider costs of modifying the free open source to ensure it is compliant with all applicable security standards.

   b. **If I8F does calculate these costs, does 18F then compare the**

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[1] GSA IT Security Procedural Guide 06-30 is included as an appendix to our response. Please note that this guide is an internal GSA document and is for OFFICIAL USE ONLY. This Guide cannot be shared, published, or distributed on the internet or to people that do not have a need to know.

modification costs to the costs of commercially available products or services that are compliant, out of the box, with applicable security standards?

18F considers the cost of any modification or configuration it may need to perform when acquiring software in order to meet Federal security standards or GSA/18F policies, whether proprietary or open source. Open source software is not inherently less compliant with Federal security standards than proprietary software.

9. **Products in use by the Federal Government must be compliant with federal security standards. What is the process 18F follows to ensure the products developed by 18F are compliant with these security standards?**

   18F is working with GSA IT to follow GSA IT Security Procedural Guide 06-30, which is included as an appendix to this response, in order to better assess systems in accordance with Federal security standards, as well as receive approval from the Chief Information Security Officer and 18F's Executive Director, prior to release.

   18F, like all organizations in GSA, is expected to adhere to Federal and GSA IT security requirements.

   a. **Has 18F ever requested waivers to any Federal security standards?**

   18F requested a waiver for sub-domains related to the Domain Name System Security Extensions (DNSSEC) security requirement. GSA IT granted this waiver request.

10. **At the hearing, Congressman Walker requested a list of GSA's business units that generate revenue for GSA's Acquisition Services Fund. Please provide a list of these business units, along with each individual unit's projected revenues or deficits by year for the next five years.**

    The Acquisition Services Fund (ASF) is organized around four major business portfolios and three initiatives that deliver solutions to partner agencies. The projections below align to the revenue projections for fiscal year (FY) 2017 presented in the FY 2017 GSA Congressional Justification, which is formulated 18 months prior to release. The out-year estimates include the same assumptions used for the FY 2017 revenue projections.

    GSA is in the process of formulating the FY 2018 Congressional Justification, which will include revised numbers for FY 2016, FY 2017, and FY 2018 from

those that are projected in the table below. We anticipate a variance from plan in FY 2017. ASF projected total operating results after replacement cost pricing (RCP), before reserves, that is between 1-2 percent of total revenue. We are happy to share those updated numbers when they are finalized and released in the FY 2018 Congressional Justification.

Operating Results (After RCP, before Reserves) *

$ in 000's	FY 2016 Request	FY 2016 Forecast	FY 2017	FY 2018	FY 2019	FY 2020
1. Assisted Acquisition Services (AAS)	9,655	11,907	14,079	19,842	26,514	29,432
2. General Supplies and Services (GSS)	-17,422	-24,012	6,702	25,285	37,476	45,400
3. Integrated Technology Services (ITS)	26,767	43,023	40,985	54,087	66,180	74,632
4. Travel, Motor Vehicle and Card Services (TMVCS)	2,600	40,447	17,852	-12,662	-10,240	-9,959
5. Integrated Award Environment (IAE)	-13,963	-46,091	-14,728	-14,432	-14,038	-13,736
6. FAS Systems Transformation (FAS-ST)	-1,778	-9,050	13,042	14,982	17,343	19,524
7. 18F		4,361	-17,658	21,493	22,142	22,165	22,076
Total	10,220	-1,434	99,425	109,244	145,400	167,369

*The ASF is authorized to retain earnings to cover the cost of replacing fleet vehicles (RCP).This table includes operating results after taking RCP into consideration. The ASF is also authorized to retain earnings for funding certain anticipated operating needs, also known as reserves, specified by the Cost and Capital Plan. Please note- the table below does not show reserves amounts

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