

# COMMITTEE ON WAYS AND MEANS SUBCOMMITTEE ON SOCIAL SECURITY

# UNITED STATES HOUSE OF REPRESENTATIVES

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STATEMENT FOR THE RECORD

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Chairman Johnson, Ranking Member Becerra, and Members of the Subcommittee, thank you for inviting me to discuss information technology (IT) at the Social Security Administration (SSA).

I am SSA's Deputy Commissioner for Systems and Chief Information Officer (CIO). Prior to my appointment, I worked for a variety of technology firms based on the West Coast and in the Silicon Valley. I learned quickly that SSA has a committed and qualified IT workforce that maintains several significant information systems to meet its mission. To provide one measure of this, during fiscal year (FY) 2015, the agency paid more than \$930 billion to more than 67 million beneficiaries representing around five percent of the U.S. Gross Domestic Product. At approximately 1.3 percent of our total outlays, SSA's administrative expenses continue to be a small fraction of overall program spending, demonstrating our cost-conscious approach to managing its resources. To support these payments and the substantial other work that our agency performs, our total IT expenditures in FY 2015, including our staff and contractors, was about \$1.8 billion or about 15 percent of our total expenses.

At the outset, let me emphasize that investing wisely in technology is one of our top critical priorities as we work to deliver smarter, secure, and more efficient service. We have consistently used our IT resources to help us efficiently and effectively deliver benefit payments and other services to millions of Americans each year. Yet we have major challenges before us. We have a significantly aged IT infrastructure, which is increasingly difficult and expensive to maintain. While I am confident in the abilities of our employees to handle these challenges, I must emphasize that we need a multi-year investment to make essential improvements to modernize our systems.

#### The Role of IT at SSA

IT plays a critical role in our day-to-day operations and program efficiency. Few government agencies touch as many people as we do. Social Security pays monthly insurance benefits to more than 60 million individuals, consisting of 41 million retired workers and 3 million of their spouses and children; 9 million workers with disabilities and 2 million dependents; and 6 million surviving widows, children, and other dependents of deceased workers. We provide Supplemental Security Income (SSI) benefits to over 8 million recipients.

The scope of our work is immense. In FY 2015, we:

- Handled approximately 37 million calls on our National 800 Number;
- Served more than 40 million visitors in our 1,200 field offices nationwide;
- Completed over 8 million claims for benefits and more than 660,000 hearing dispositions;
- Handled over 35 million changes to beneficiary records;
- Issued about 16 million new and replacement Social Security cards;
- Performed almost 2 billion automated Social Security number verifications;
- Posted about 266 million wage reports;
- Handled over 18,000 cases in Federal District Courts;
- Completed over 2.2 million SSI non-medical redeterminations;

- Completed 799,000 full medical Continuing Disability Reviews; and
- Completed approximately 3 million overpayment actions.

We use most of our IT funding for ongoing operational costs such as our National 800 Number service and our online services, both of which help us keep pace with the recent increases in claims. We are exploring and developing ways we can expand our online customer base. Each year, we see greater numbers of people across all demographic segments doing business with us online. Since we launched *my* Social Security in 2012, over 25 million customers have created accounts. In FY 2015, customers continued to increase their use of our online services to conduct business with us as they completed over 87 million transactions via our website. In FY 2015, we received more than half of all Social Security retirement and disability applications online, including 75 percent of Medicare applications.

Customer satisfaction with our online services also continues to shine, as five of the top ten ranked Federal websites were SSA online customer service products, according to the 2015 ForeSee e-Government Report Card. We will continue to enhance our online services and promote them as a safe and convenient service option to increase usage and reduce unnecessary field office visits. Our goal is to increase the volume of online transactions by 25 million each year, which would result in 112 million transactions in FY 2016 and 137 million in FY 2017. With increased usage of online services, we can free up more time for customers that need or prefer to complete business with us in person.

We continue to increase the services available on our online *my* Social Security portal. Individuals may access their Social Security Statement at any time through their personal online *my* Social Security account. In 2015, we added several new services to our *my* Social Security portal including replacement Medicare Card services, and the capability for *my* Social Security users to download data from their Social Security Statement to assist them in financial and retirement planning. Other online service efforts include a successful limited rollout – up to eleven States and the District of Columbia over the last year– of a secure Internet Social Security Number Replacement Card application for eligible U.S. citizens age 18 and over. We expect to expand this service to other States in the near future.

In this calendar year, we are enhancing our online *my* Social Security service so that it is more compatible with mobile devices to improve service to that fast-growing segment of the user community. In addition, we are developing new customer engagement tools including Click-to-Chat and a Message Center for relaying informational messages to *my* Social Security users. Other services include the development of a Smart Claim application that will allow our customers to get a detailed status on their benefit applications within *my* Social Security. We will later expand Smart Claim to include online service options for SSI claimants as well.

Below, I will detail some of the efforts we are making to improve how we invest in IT and our efforts to modernize our IT infrastructure.

#### **IT Investment**

Our IT modernization planning and investment efforts align with the recently passed Federal Information Technology Acquisition and Reform Act (FITARA), which aims to increase Federal CIO authority for IT planning and decision making and enhance management of Federal IT investments.

FITARA and OMB guidance require agency CIOs to provide the public (via the IT dashboard) on a regular basis information about major IT investments, including rating such investments according to risk. We use all of OMB's suggested factors when considering our ratings as well as our knowledge of the health of each investment, evolving or emerging contextual issues, cost and schedule performance based on earned value, and operational performance metrics.

We continue to revisit our process and rating criteria and our source documentation for improvement opportunities. We have begun to expand our dashboard updates to start reporting the CIO ratings on a monthly basis rather than quarterly. However, we update our evaluation of major IT investments, including levels of risk, as soon as a new evaluation becomes available that changes the current assessment of any major IT investment on the dashboard.

I am pleased to report that, over the last year, we developed a new IT Investment Process (ITIP) that will improve the way we manage and invest in IT at SSA. ITIP will focus on up-front project planning with outcomes tied to specific agency goals. Improved project planning and documentation will allow us to assess project costs, risks, and timelines with greater accuracy. In addition, an enterprise-wide executive IT investment board will meet throughout the year to make informed funding decisions on projects that provide the greatest benefit to our agency's mission. As a result, we will be better able to deliver the right project on time and within budget, and provide the best tools for our employees and superior service to the American public. Finally, the new process will include formal post-implementation reviews that look at the IT implementation process and the ongoing return-on-investment, planned and actual, of the resulting business applications.

#### **IT Modernization**

I appreciate the Subcommittee's interest in our efforts to modernize our legacy information systems. The legacy infrastructure is not sustainable, but these aged systems are the very production tools that our employees rely upon each day to provide service to the public. We must maintain the legacy systems while, in parallel, developing their replacements. We are now at a point where we must undertake a larger, multiyear effort.

In the late 1970s and early 1980s, because of the massive scale of our operations, SSA was aggressively developing systems and databases to store information about tens of millions of citizens. These systems were leading edge systems that pushed the state of the art in the 1980s.

Today, these legacy systems are out-of-date, and the cost required to bring them to a modern state represents a technical debt that accrues interest with each passing year. Their complexity makes it costly and challenging to add the functionality needed to meet the continually evolving

requirements placed on us by the Administration, Congress, and the people we serve. The extra cost of building on these aging systems represents part of this technical debt. Our university systems generally are no longer teaching the mainframe computer application languages, development, and operating environment, and the Federal staffs who developed and maintained these systems are retiring. As a result, the interest payments on this 30-year-old technical debt are compounding, and in the next five years, we could face a crisis keeping our systems running.

Generally, our approach to modernizing our major IT systems has been to replace components of systems rather than the system as a whole. This approach tends to reduce risk by reducing interdependencies in a single development effort and by reducing the scope of the modernization effort. For several years, we worked to modernize our IT in small pieces at a time, reducing our technical debt, but we have exhausted nearly all of these small efforts. This incremental and opportunistic approach worked well given the ebb and flow of annual funding. However, we are at a point where this approach is no longer viable; technology is advancing faster than we can incrementally modernize. To that end, we are focusing our modernization efforts in three primary broad areas: database systems, legacy code, and infrastructure.

Our first broad area of focus is core database systems. Because of limitations in the technology available when our databases were designed, all updates were managed via a sequential, batch process that applied updates queued during the day. Modern databases update in real time. In addition, legacy databases were designed around specific applications rather than organized around data subjects. This creation of data silos makes adding broad agency-wide capabilities difficult and expensive. In the last year, we have started to re-organize our data into a modern architecture and began development of a framework to allow real-time updates. Unfortunately, all the legacy code base that we have becomes the issue.

Therefore, our second broad area of focus is modernizing that legacy code. Our efforts here are designed to address the complexity and pre-modern design of our oldest systems. We are exploring ways to capture value from the legacy code base, either through a code migration or by capturing the "gist" of the business rules. We are exploring different options, including "buy" as opposed to "build." We are also aggressively moving to modernize our software engineering tools and skills. In order to modernize the skill of our staff, with the aim of reducing the costs of modernization, we will develop an intensive training program. We have one very significant new project where we are using these skills to develop a brand new system and, so far, the impact is very positive. Finally, we are fully embracing agile development methods. This approach enables us to roll out more quickly new functionality to users while reducing the risk that what we produce will not meet users' needs.

The third broad area of focus is modernization of our infrastructure. For more than 30 years, we have been predominantly a user of mainframes for our mission-critical systems. For many years, only mainframes could handle our workload. In response to Acting Commissioner Colvin's direction to push us towards becoming a more data driven enterprise, we are deploying a modern business intelligence eco-system in the cloud. We are working to develop a cloud environment on our premises and then a hybrid cloud environment to further enable us to take advantage of the economics of cloud computing. We have also established a Modern Development

Environment (MDE) in the Amazon Web Services cloud. MDE is a suite of tools and engineering practices for supporting modern software development.

With our plan to leverage our new data capabilities, development techniques, and infrastructure, we are beginning a fundamental review of how we engage our customers and our employees. Through a new Customer Connect initiative, we are considering how we can improve the customer experience in 2020. This initiative aims to reconsider not just our technology infrastructure, but to challenge SSA to reassess the business processes that have grown and evolved over the last eighty years.

A portion of the fiscal year 2016 appropriation helps to begin the design of the legacy replacement systems. However, we need a sustained, long-term investment to make the changes needed to develop a fully modern IT infrastructure that is capable of supporting the immense responsibilities I described earlier in my testimony. That is why the President's Budget for FY 2017 requests multiyear funding of \$300 million spread over four years, to undertake an IT modernization project that will bring our systems current. In FY 2017, \$60 million is included as part of the FY 2017 President's Budget. The FY 2017 President's Budget also contains a mandatory proposal for additional IT modernization funding - \$80 million each year in FYs 2018-2020. The project will require effort and investment in several areas including modernization in computer language, database, and infrastructure.

We have demonstrated in the past that we can undertake significant, multiyear IT efforts. For example, in FY 2009, Congress provided \$500 million for the construction and partial equipping of a new National Support Center (NSC) as part of the American Recovery and Reinvestment Act. We are currently transitioning our nationwide computer operations from the National Computer Center (NCC) to the NSC. Our systems maintain demographic, wage, and benefit information on almost every American. While once a state-of the-art data center designed for mainframe use, the NCC is over 30 years old and the facility infrastructure systems have exceeded their useful life. With these Recovery Act funds, we took timely action to ensure a new facility was built and operational as the NCC nears the end of its functional life.

## **Need for Adequate and Sustained Funding**

Before concluding, let me emphasize that we need adequate, sustained funding to carry out our important program integrity and stewardship, while also ensuring adequate levels of service to beneficiaries and claimants. We are working hard to manage the agency with far less money than we need – our FY 2016 enacted budget was around \$350 million less than the President's request. Consequently, we have been forced to constrain every aspect of the budget including hiring, overtime, and information technology (IT), and we are seeing service degradation in many areas. Service delays are causing hardships for our most vulnerable citizens, who are at an increased risk of both homelessness and disability. SSA is dealing with an unprecedented backlogs at the hearings level and in our program service centers, where we process payments.

That being said, we are greatly concerned about FY 2017, when we will serve a record number of beneficiaries. With services already in a fragile state, additional funding constraints in FY 2017 would put our services at greater risk of long-term damage. It is pivotal that we get a

funding level that allows us to rebound from this year's constraints and to improve service to the public. The President's Budget request of \$13.067 billion will do so.

## **Conclusion**

I am glad to highlight the importance of IT in how we administer our programs and the IT challenges we face in the years ahead. The systems that serve our mission are old, and they are primarily supported by the staff who developed them 30+ years ago. As this staff retires, the knowledge of these old applications and the knowledge of the legacy infrastructure they are built upon will diminish. We have to modernize these legacy systems before this knowledge is gone. Developing the new capabilities based on new technology to best serve the public is an expensive proposition if we have to build it upon this aging foundation. We have to modernize these legacy systems to provide these new services at a reasonable cost. We need funds to enable the modernization in the same way the nation needs funds to modernize other aging infrastructure, such as roads, dams, and the grid.

We look forward to working with Congress to overcome these challenges. Thank you and I would be glad to take any questions.